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ABSTRACT

The bulk of this book is divided into 3 major sections: (1) teaching about drugs; (2) facts about drugs; and (3) supplementary reports which deal with legal aspects, prevention, drug use-student value correlations, motivation, etc. The section concerned with teaching about drugs provides concrete suggestions for elementary and secondary educators, as well as administrators. Much of the focus is on communication with youth. Facts are presented about marihuana, amphetamines, barbiturates, LSD, and heroin. In addition, there are discussions about drug dependence, one paper on pharmacologic therapy for narcotic-dependent persons, and a fact sheet on federal drug laws. Two shorter sections, which conclude the book, consider the use of films in drug abuse education and, in a somewhat different vein, discuss the essential components of an inservice drug education workshop. An annotated list of movies and a bibliography of selected references are included. (TL)

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Resource Book for Drug Abuse Education

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NATIONAL CLEARINGHOUSE FOR MENTAL HEALTH INFORMATION

ATTENTION

This publication is undergoing revision. The new edition will include recently enacted Federal legislation relating to narcotics and dangerous drugs. Meanwhile, certain sections of this book contain soon to be outdated and therefore no longer accurate information regarding Federal penalties for the possession and sale of dangerous drugs.

The Comprehensive Drug Abuse Prevention and Control Act of 1970, passed in October 1970, has revised the Federal laws concerning drug abuse and will serve as a model for similar laws in the States. The new Federal schedule of penalties, effective May 1, 1970, is summarized in the following.

Marihuana

Under the new Federal legislation, possessing or giving away marihuana is a misdemeanor instead of a felony, and minimum mandatory penalties for such offenses are abolished. However, the penalties remain heavy. Possessing or giving away a small amount of marihuana with no charge may bring up to 1 year imprisonment and/or a $5,000 maximum fine. Punishment becomes more severe for a second and subsequent offenses, which are punishable by imprisonment up to 3 years and/or a maximum fine of $10,000. Heavy punishment confronts a person, at least 18 years of age, who distributes or sells marihuana, even for a trivial sum, to one who is under 21 years of age. For a first offense, the penalty is imprisonment for up to 10 years and/or a $30,000 fine which goes up to 15 years imprisonment and a $45,000 fine for second or subsequent offenses. If a person is under 21 on a first offense, he may be placed on probation in lieu of sentencing and the official record of his arrest, trial and conviction may be erased after satisfactory completion of probation. Persons involved in a continuing criminal enterprise face penalties of 10 years to life for the first offense, plus a $100,000 fine and forfeiture of profits resulting from the enterprise. A second offense will bring 20 years to life, and a $200,000 fine.

Many State laws are more severe than the Federal law, dealing with marihuana as if it were a narcotic.

Stimulants

These drugs are legally available only on a doctor's prescription. Under the new legislation, illegal possession is punishable as follows: for a first offense, imprisonment of up to 1 year and/or a maximum $5,000 fine. Unlawful distribution or possession with intent to distribute may bring up to 5 years' imprisonment and/or a maximum $15,000 fine and a required 2-year special parole term (except that cocaine is subject to stiffer penalties because it is legally considered a narcotic). Involvement in a continuing criminal enterprise carries a penalty of from 10 years to life imprisonment, and a maximum $100,000 fine and forfeiture of profits from and interests in the enterprise that is in violation of the Act, if it is a first offense. For a second or subsequent offense, penalties are doubled. A person who is at least 18 who distributes amphetamines illegally to a person under 21 years of age is subject to imprisonment and/or fine twice that otherwise authorized.

Sedatives

Like the stimulant drugs, the sedative drugs are available only on prescription. The Comprehensive Drug Abuse Prevention and Control Act of 1970 controls abuse of the drugs in two ways. It provides for regulating manufacture, distribution, and possession. Thus, all registered manufacturers, processors, and their suppliers, wholesale druggists, pharmacists, hospitals, clinics, public health agencies, and research laboratories must keep accurate records of receipts and outflow. No prescription for a controlled drug older than 6 months can be filled, nor can refills be made more than five times in a 6-month period.

There are also strong penalties for illegal possession and distribution. The new Federal law replaces old penalties for illegal possession and distribution established under previous legislation. Illegal possession is punishable as follows: for a first offense, imprisonment of up to 1 year and/or a maximum $5,000 fine. Unlawful distribution or possession with intent to distribute a barbiturate listed in the five schedules containing drugs with the highest abuse potential may bring up to 5 years' imprisonment and/or a maximum $15,000 fine, and a required 2-year special parole term for a first offense. Involvement in a continuing criminal enterprise (large scale trafficking) carries a penalty of from 10 years to life imprisonment, and a maximum $100,000 fine, and forfeiture of profits from and interests in the enterprise. For second and subsequent offenses penalties are doubled. A person who distributes barbiturates illegally to someone under 21 years of age is subject, if it is a first offense, to imprisonment and/or fine twice that otherwise authorized.

LSD

For unlawful possession of LSD under the new legislation, an offender is subject to a maximum of 1 year in jail and/or a $5,000 fine. On a first offense for possession, a person under 21 may be placed on probation, with his conviction erased from official criminal records if he meets the requirements of the probation period. Second and subsequent offenses are punishable by 3 years imprisonment and a $10,000 maximum fine.

For unlawful distribution, and possession with intent to distribute, penalties range up to 5 years and/or a $15,000 maximum fine, with a 2-year special parole term required. For involvement in a continuing criminal enterprise, penalties for a first offense range from 10 years to life, and $100,000 fine and forfeiture of profits from violation of the Act; for a second offense, 20 years to life, and a $200,000 fine and forfeiture as above. Any person at least 18 years of age who distributes LSD to a person under 21 years of age is subject to imprisonment and/or fine twice that otherwise authorized.

Narcotics

Under the new Federal penalty schedules, illegal possession is punishable as follows: for a first offense, imprisonment of up to 1 year and/or a maximum $5,000 fine. Second and subsequent offenses are punishable by up to 3 years' imprisonment and/or a maximum fine of $10,000.

For unlawful distribution of narcotics in the two schedules of highly dangerous drugs, and for possession with intent to distribute, if a first offense, the penalties are imprisonment up to 15 years and/or $25,000 maximum fine, with a 3-year special parole term required. Second and subsequent commissions of this offense are punishable by imprisonment or fine twice that otherwise authorized, and a special parole term of 6 years. The penalties are somewhat lower if the drug appears in Schedules III through V, which include drugs with less abuse potential. A person who is at least 18 and who gives a narcotic to a person under 21 years of age is subject to imprisonment for up to 30 years for a first offense and 45 years for subsequent offenses and/or a fine twice that otherwise authorized. Those persons involved in continuing criminal enterprise face imprisonment of 10 years to life, and a $100,000 fine and forfeiture of all profits gained from the enterprise. For a second offense, penalties are set at 20 years to life, a $200,000 fine, and forfeiture of profits.

National Clearinghouse for Mental Health Information

RESOURCE BOOK FOR DRUG ABUSE EDUCATION

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INTRODUCTION

The abuse of dangerous drugs is a growing problem across the Nation. The reasons for this are complex and there are no easy solutions. But it is clear that traditional methods of deterrence, involving reliance on scare techniques or moral persuasion, have not proven effective.

The National Institute of Mental Health, the Federal agency that has major responsibility for research and educational efforts relating to drugs, has initiated a broad-based public information and education program to provide facts about drugs. Among those for whom special materials are being prepared are teachers. It is not surprising that teachers, who are being called upon increasingly to "do something" about growing drug use, have been frustrated and troubled about how to go about it.

It is a task that demands extremely careful preparation and implementation. Yet most teachers have few resources with which to mount an effective drug abuse prevention program. Useful materials on the subject have been scarce. Further, where programs have been initiated to combat drug abuse, they have often been hampered by inadequate or inaccurate information. Few teachers have the necessary preparation for evaluating drug-oriented materials (and a great many words have been spoken and written about drugs that perpetuate myths).

Recognizing the need for materials to help teachers deal more effectively with drug abuse, the NIMH during 1968–69 conducted a project involving the development of teacher training workshops and resource materials. Under contract with the American Association for Health, Physical Education, and Recreation and the National Science Teachers Association of the National Education Association, a two-week pilot workshop on drug abuse education was held in California.

Subsequently, pilot inservice training workshops have been held in many States. Two-day preconvention seminars in drug abuse education were held in conjunction with the annual meetings of AAHPER and NSTA. The seminars included programs for teacher inservice training, presentation by authorities on the pharmacological, legal and psychosocial aspects of drugs, and evaluation of teaching aids, both audiovisual and printed.

A number of materials to assist school systems in developing sound drug abuse prevention programs have been prepared under the Drug Abuse Education Project. Some of these are included in this Resource Book. Additional aids that will also be available include guidelines to innovative teaching methods in drug abuse education, and filmed lectures and presentations.

This Resource Book contains summaries of factual information on the major drugs of abuse, and techniques and suggestions that experienced drug educators have found helpful in communicating with young people who are thinking about drugs or have already experimented with them. An effort has been made to include papers by medical authorities and social scientists reflecting a range of views regarding drugs. Literature expressing the more conservative positions may be found at every hand, and is ready of access. Thus, materials designed to enhance understanding of the young by the adult generation receive emphasis. Without familiarity with varied points of view, including those of the young, a teacher cannot effectively discuss the drug problem with young people.

It is hoped that this material will introduce teachers to new ways of strengthening communication with students in this area. The goal is the development of skills in the use of drug materials which will enable teachers to open up the kind of dialogue and discussion that is a prime requisite in influencing youth attitudes.

A section on planning drug abuse education workshops is included. Most educators, plagued by the problem of how to teach about drugs, have found that the simple expedient of reaching for an all-purpose speaker, film or pamphlet is not the answer. Programs and techniques capable of effectively influencing young people must be attuned to the complexities and anomalies that characterize today's youth scene. The inservice training workshop can provide essential background information, and also create a new awareness of approaches and methods of teaching. The guidelines on planning a workshop presented here represent a synthesis of experiences gained from the workshops conducted under the Drug Abuse Education Project.

1/ TEACHING ABOUT DRUGS

BACKGROUND CONSIDERATIONS FOR DRUG PROGRAMS

Marvin R. Levy, Ed. D., Project Director

We are a drug-using society. A large segment of our population looks to drugs to alleviate a host of physiological, psychological and social discomforts. Young and old alike are inundated with commercial sophisms eulogizing drug products. Within this persuasive cultural milieu, drug abuse is spawned. Education, to be effective, must first recognize the complex historical, social and psychological setting as a powerful stimulus to the use and abuse of drugs.

The best deterrent to drug abuse is the individual's value system and his assessment of the consequences associated with drug involvement. Decision making can be aided when sensitive teacher-pupil relationships based upon mutual understanding, integrity, and honesty are established. Exaggeration, distortion, and sensationalism are propaganda, not education, and have no place in the school.

The nature of the problem is such that the school program must draw together the students, the total school staff and the community. An initial effort must be made with the administrators to insure that cogent school policies are promulgated, thereby enabling the school environment to be relevant to each student's needs, interests, and aspirations. School policies should support rather than punish and enlist rather than alienate. Those who develop school policies must be fully informed regarding the nature of drugs, psychosocial motivations, legal considerations, and the content and process of their communities' teacher inservice training and student instructional programs.

Intensive teacher inservice programs are essential. In order to present an instructional program which does more than dispense facts, those charged with teaching need a great deal of preparation. Without it, few teachers can analyze the facts and nonsense about drugs and come to decisions. Further, group process training is imperative for developing communication and awareness skills.

Parents and the community should be informed of their roles in preparing young people to mature successfully in our culture, by programs that increase adult participation, understanding and support. It is important that the community be convinced that the school plays but one part in the total effort.

The school program for students must begin early. It is no longer appropriate to conceive of drug abuse education as a unit or course only at the secondary level. Concepts, attitudes and behavior are developing during the elementary years and the school cannot ignore this learning opportunity. The program should examine societal conditions that promote drug use and abuse. Drugs per se are not the issue; rather, the issue is why people use them. The program can include the abuse potentials of drugs, the meaning of drugs to the individual, pharmacological properties, and legal ramifications. The intent should be upon an examination of decision-making in such a way that the individual becomes more aware of the factors that influence his decisions. The program should encompass the principles of group work. Central to the success of the instructional program is the school setting which encourages an acceptance of all children and an understanding of their individual needs which, when frustrated, may lead to drug abuse.

Finally, there must be widespread commitment on the part of the entire school staff, parents and the community to create an open environment where boys and girls feel secure, wanted, loved, and free to express their innermost feelings. The school should be this kind of place.

SUGGESTIONS FOR EDUCATORS

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Drug abuse is many things. It is the heroin user injecting his bag of H, the Methedrine user high on "speed," the teen-ager smoking "pot," the 12-year-old sniffing model airplane glue. But it is also the adult starting his day with an amphetamine for a needed "pick-me-up" and ending it with several drinks to "unwind" and a barbiturate to put him to sleep.

The problem of drug abuse reaches deeply into our values, aspirations, and fears. It is an emotionally charged area for almost all of us. Drug abuse is a serious, growing problem here (and in many other countries as well) and teachers are increasingly being called upon to *do something.* They face the difficult task of deciding just what and how to teach about drugs.

Certainly no single article, pamphlet, book or film can enable teachers to be effective. There is much still to be learned about the problem of drug abuse and particularly about how to be more effective in discouraging it. Establishing an atmosphere conducive to good communication between teacher and students is of basic importance. This article contains some hints that have proven helpful in communicating with youngsters who are thinking about drugs or have already experimented with them. It is only a very elementary introduction to ways in which teachers can strengthen relationships of trust and understanding with students in this highly charged area, and open up dialogue and discussion—which is far more likely to influence young attitudes and behavior than the lectures and sermons that have all too often marked the crusade against drugs.

Some Concrete Suggestions

Avoid Panic. Teachers are in a particularly good position to encourage parents, students, and the community to remain level-headed about drug abuse.

Drug abuse, like other forms of behavior, may have varying causes. For some, it may represent ill-advised experimentation; for others it may indicate serious psychological problems. If a teacher has reason to believe that one of his students is experiencing serious emotional difficulties, consultation should be sought with the school counselor and a conference arranged with the parents with a view to obtaining professional help for the youngster. Some types of behavior that may be associated with serious problems include: loss of interest in school and social relationships with others, marked alteration in behavior, deterioration in physical and personal appearance, and the development of problems in dealing with school and parents. Since the reasons for drug use vary widely, so must the approaches to individual students.

While the teacher can play a role in referring suspected problems to the proper authorities, a panic reaction expressed either to the student or to a parent can serve only to alienate the student further and to confuse what should be straightforward, objective, and professional action if the student needs help.

Keep Lines of Communication Open. Encouraging an atmosphere in which the student feels free to confide in parents and teachers and to discuss his concerns is an important first step. Obviously, the size of present classes often makes personal contact difficult. At the same time, if the student realizes that his parents and teachers are making a genuine effort to understand his point of view, this realization is likely to help him in the process of growing up. Although it's sometimes difficult, it's important to avoid being moralistic and judgmental in talking about drugs and drug users.

Many adults, including teachers, feel uncomfortable and defensive about discussing drugs with teenagers. This is sometimes due to awareness of our own inconsistencies in the use of everyday substances like tobacco and alcohol. Nevertheless, there are good and convincing arguments against the use of drugs which can be stated in terms that are persuasive to youth. For example, some teen-agers see the use of drugs as one way of developing heightened self-awareness or of enhancing their inner freedom. Pointing out the difficulty of achieving these goals if they become drug-dependent may help them realize the fallacy of this viewpoint. Similarly, if young people are to improve the society of which they are critical, they can only do so by remaining a part of it rather than by chemically "copping out."

Avoid "Scare" Techniques. Use of sensational accounts or scare techniques in trying to discourage drug experimentation is usually ineffective because the teen-ager's direct knowledge frequently contradicts them. Teen-agers are demanding—and are entitled to—honest and accurate answers. Given the facts, youngsters often quickly respond. The apparent decline in LSD usage, for example, is believed to be related to the well-publicized reports of possible adverse psychological and potential biological hazards.

It is impossible to eliminate or legislate away all possible substances of abuse. The individual decides for himself whether to use or not to use drugs. To be effective, prevention ultimately must be based on each student's decision not to use drugs because they are incompatible with his personal goals. Emphasizing that no authority, whether school official or police officer, can make that ultimate decision for him may help the youngster clarify his personal responsibility. It may also help to reduce the adolescent tendency to view drug abuse as an act of rebellion.

Because the abuse of drugs frequently carries with it heavy legal penalties, it is important that youngsters be aware of the possible long-term results of their behavior. While this should not be the primary emphasis, the legal and social implications over a lifetime should be indicated as two of the essential factors to be taken into consideration in any decision to use or not use drugs. Some young people, feeling keenly that certain drug laws are unjust, advocate violating them. Thoughtful discussion of the implications of such violation and of whether the use of drugs is sufficiently important to them to justify such extreme measures may be helpful.

Avoid Creating an Atmosphere of Distrust and Suspicion. Like many parents, some teachers, anxious to discourage drug abuse, are likely to assume that *any* departure from the preferred styles and customs of the majority is indicative of drug abuse. Youngsters who have tried or are using drugs come in all sizes and shapes—with short as well as long hair, and conventional clothes as well as eccentric dress. So do those who don't use drugs.

By equating unconventional appearance with drug abuse, we may encourage the very behavior we're trying to avoid. At a minimum, the youngster is likely to feel that the conventional world is completely opposed to any originality or creativity that does not fit a common mold and that the price of acceptance is complete conformity. While his external appearance may conform to the norm, there is no assurance that drug abuse will not become his private mode of rebellion.

Since the problem of teen-age drug abuse embraces a wider range of substances than those prohibited by law, even an attitude of active suspicion and continuous surveillance, were that possible, would not eliminate the problem. It would, however, almost certainly destroy the climate of trust and confidence essential to the intergenerational communication that is desirable in preventing abuse.

Avoid Drug Stereotypes. Many of us, when we think about the drug misuser, immediately think of some more or less vague stereotype of "the addict." Similarly, we often tend to think of all the misused drugs as being generally alike. Nothing could be further from the truth. Present evidence suggests that the vast majority of youngsters who experiment with marihuana, the most popular illegal drug of abuse, do so on a onetime, experimental basis.

Drugs differ widely in their chemical composition and, more important, perhaps, in their effects—depending upon the personality of the user and the circumstances of use. The person who misuses drugs may vary from the onetime user experimenting out of curiosity to the chronic, heavy user who is psychologically dependent on a drug. While some types of drug misuse may be fairly apparent even to the untrained observer, other types may be so subtle as to escape the detection of even the expert.

Although some drug users go on to the use of more potent types of drugs, many others do not. Just why some users become dependent on particular drugs and others do not is not very clearly understood. It may be related to personality development, but physiological factors may also play a role. While a physical dependency on the drug plays some role, psychological dependence appears to be more important. Physical dependence on heroin, for example, can be cured in a relatively short time; yet the heroin addict has a very difficult time avoiding using the drug again upon discharge from treatment.

Be Well-Informed Yourself About Drugs. Much information is available about the drug problem—some of it accurate and useful. But unfortunately much of what is published tends to be overdramatized and frequently inaccurate.

Much of the controversy over the effects of marihuana and its control, for example, results from overinterpretation or misinterpretation of what little data are presently available. Drug-use advocates frequently use the scarcity of scientifically reliable information as a basis for arguing that marihuana and other drugs are harmless. The absence of complete agreement based on reliable evidence that a substance is harmful does not, of course, demonstrate its harmlessness. Often, relatively long-term use of a substance is required before its public health implications are apparent. Cigarette smoking provides an obvious and apt example. While American experience with marihuana is of relatively short duration, foreign research studies, though often difficult to interpret, suggest that long-term use of marihuana may be detrimental to the health of the users.

A discussion of the implications of various social policies regarding marihuana and public health is one approach that may enable you to reach your students. The social problems of adding another intoxicant of unknown long-range implications to our present difficulties with alcohol may be the subject of profitable discussion. Another topic which might stimulate good discussions among intelligent youngsters and their teachers is the problem of allowing a harmful drug to become popular and then subsequently making it illegal. It might also be productive to discuss some of the originally unsuspected deleterious effects of drugs, such as the birth defects resulting from use of Thalidomide.

Use Drug Education Materials as a Springboard to Discussion. Even good films, pamphlets, and other materials need to be made personally relevant to students. This can usually be done best through discussion. As teachers skilled in classroom discussion are well aware, much of the art of effective discussion requires that the teacher be a thoughtful and responsive listener as well as a catalyst.

The arguments (often heated) of the student who advocates use of drugs deserve a hearing and, when appropriate, a considered rebuttal. Often a teen-ager's apparent conviction masks considerable uncertainty about the worth of his arguments, which are frequently offered to test their validity and/or the honesty of the teacher. Summarily rejecting the advocate's points may alter his classroom verbal behavior but it is unlikely to change his thinking. The most probable result of an arbitrary "put down" will be to convince the youngster that adult objections to drug use are merely prejudices.

A student-run discussion on prevention of drug abuse may be even more effective. Teen-agers are frequently far more responsive to the mores and values of their own group than they are to the values of the adult world. Former drug abusers can often be highly effective in communicating with a student group—they can "tell it like it is!"

Use by teachers and parents of alcohol and tobacco is of more than casual interest to teen-agers—all too often this is the thrust of their argument in favor of marihuana. In addition, the problem of compulsive overeating may be discussed as similar to drug dependence. Habits, such as smoking and drinking and even compulsive overeating, can readily serve to illustrate the highly persistent nature of habitual behavior despite strong rational grounds for change.

As adults we can also serve to demonstrate that it is possible to live an involved, truly meaningful life without the use of chemical substances to add meaning or excitement. The adult who is himself "turned on" by life without recourse to drugs is one of the best advertisements for that type of life.

Alternatives to Drug Use

Youngsters who find satisfaction in other activities are less likely to find *regular* use of drugs appealing. Aware of this, the teacher may open up for individual or classroom discussion ways in which students are or can become involved in activities that have personal meaning for them.

Many young people, while attempting to appear blasé or uninvolved, feel keenly the problems of our contemporary world, and opportunities for active involvement, such as work with a political party, or a program for slum children, might be encouraged. While a strong interest in other activities may not deter a student from experimenting with drugs, he is less likely to adopt habitual drug use if he feels "turned on" by shared and constructive human experiences.

Adolescence is a lonely time for many youngsters. The teen-ager who is unable to find his place in some orthodox group sometimes turns to drug use as a means of finding a kind of group acceptance. The student who is isolated from others or having more than the usual difficulties in gaining acceptance will sometimes respond very well to a special interest shown by one of his teachers. Even when the teacher is unable to solve a problem, he may serve as a necessary bridge in helping the student get assistance from some specialized professional source. Particularly for the student with a poor home situation, a sympathetic teacher can provide a model of an understanding adult who has no need to escape into a state of drugged unreality.

Wherever possible, discussions of drug abuse should be integrated into the general curriculum rather than limited to a specific drug abuse unit or lecture.

COMMUNICATING ABOUT DRUGS

Helen H. Nowlis, Ph.D., Professor of Psychology, University of Rochester

The area of the use and abuse of drugs is a good example of the role of biases, even among professionals. Specialists in each area look at the total problem and see it primarily from the perspective of their own theoretical background, major involvement and experience. Thus the medically trained see in bold relief the medical aspects of the problem. But even within this one point of view, there are differences in emphasis depending on whether one's special interest is research or clinical practice, psychiatry, psychopharmacology or public health. The same can be said about the many other specialists who get into the act: the psychologists, sociologists, anthropologists, enforcement agents, social workers, ministers and journalists. Each one tends to ask different questions and to seek answers in different ways. It reminds one of the proverbial blind men and the elephant.

It is no wonder, then, that the layman, the legislator, the college administrator, the college student, faced with a multitude of points of view, resorts to selective perception, and chooses that position which does the least violence to his own established pattern of attitudes and beliefs. But a position arrived at in this way only leads to further problems when it must be defended or acted upon in the face of questions or objections from other people who have arrived at other positions through their selective perceptions with a different set of attitudes and beliefs as a screen. One of the complicating factors is that adult patterns, having persisted for a longer time, tend to be more elaborate and more firmly held than those of college students.

I would like to suggest that we talk about "marihuana," "LSD," "barbiturates," "amphetamines," "alcohol" and avoid such awkward general categories as "narcotic," "drug" or "medicine." Such categories are laden with such a variety of attitudinal excess baggage that clear communication and discussion are virtually impossible.

The second attitudinal problem which makes clear thinking and communication difficult when we are considering complex issues arises from our tendency to think in terms of opposing categories, a tendency which Charles Osgood calls psychologic. For example, we tend to label things and people as good or bad. In the process, we may apply the label to the thing on the basis of what it is not rather than what it is.

In the interest of good communication, let us check some of our excess baggage and not talk about "good drugs" and "bad drugs," "safe drugs" and "dangerous drugs," even "drug effects." It would be difficult to find a single drug which is not potentially dangerous for some people, under some circumstances, at some dose level. A reaction to any drug is basically the result of the interaction between an ingested or injected chemical and a physically and psychologically complex individual. It is a

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Based on remarks made at National Association of Student Personnel Administrators Drug Education Conference, Washington, D.C., November 1966.

function of dose, of pattern and length of use of the drug, of the physiological and psychological condition of the individual, of the situation or circumstances under which it is taken, of who administers it, of the expectations of the person who administers it as well as of the person who takes it. In some instances, with the proper circumstances and expectations, placebos—normal saline solutions, sugar or lactose pills—may relieve post-operative pain, produce hallucinations, do most anything that a drug might do.

One other fact that we should note here is what is generally referred to as "side effects." Virtually every drug has other effects, sometimes harmless, sometimes annoying, sometimes harmful.

While we are considering terms which should be defined if we are to think and communicate effectively, we should clarify the terms drug use and drug user. Much of the confusion that exists in the reporting and interpreting of statistics and in journalistic generalizations has arisen because of lack of definition of these terms. A large number of the so-called drug users have merely used drugs on one or a few occasions. In contrast to these there does exist a group for which I would prefer to reserve the term user. Students make a clear distinction between those who briefly experiment with a drug and those for whom use of the drug has at least temporarily become an important factor in their lives. The latter they call "heads"—"pot heads" (marijuana), "acid heads" (LSD), etc. The danger in not distinguishing between the casual experimenter and the 'head' is that it can lead us to erroneous generalizations and assumptions both about the students and the drugs. Drug user is also one of the terms that carries heavy excess baggage.

As a social psychologist, I would like to talk about the dynamics of communication in any educational process. As Lasswell suggested years ago, there are at least three important factors, none of which is simple and none of which can be neglected: "Who says What to Whom?"

It is most important that the communicator be aware of the dynamics of his role, that he be equipped with the best current information and resources in the area of drug usage and drug effects, and that he understand the variety of differences in motivational and attitudinal status of his students.

First, it is most important for communicators about drug use to have made a sincere assessment of their own goals and motivations. We may define the issues and present the best and most objective information as frankly as we can and then trust the student to make his own decision. On the other hand, if we have already decided what students should do and we feel that the risks in letting them make their own decisions are too great, we may selectively use information to explain or justify our position. Either approach is defensible and each presents its own problems, but all concerned should be aware of which position is being taken. We run into all kinds of problems if we waver from one to the other or appear to be operating under one approach when we are really operating under the other. You cannot say, as so many parents do: "You decide—as long as you decide my way." In the area of the use and abuse of drugs by college students, either position presents complex problems.

Second, the communicator must have clearly thought through the issues in his own mind. It is probably wise to clearly separate the question of the dangers or abuse of individual drugs, both physical and psychological, from the question of legality. When a presentation of the untoward effects of a drug, even the potential untoward effects, is designed to support the illegal status of the drug, battle lines are drawn on the basis of individual rights vs. arbitrary authority and invasion of privacy, and none of the relevant issues is open to rational, unemotional consideration.

Third, effective communication has been shown to be a function of the prestige of, respect for and credibility of the communicator. It has been demonstrated that attempts at persuasion based on a high fear appeal are generally ineffective and may boomerang, especially with subjects of high intelligence. This type of appeal almost invariably casts doubt on the credibility and motivations of the communicator. An audience which becomes concerned with testing credibility will be distracted from the real issues presented in the communication.

The final factor that should be mentioned with respect to the communicator is the fact that if an audience has some knowledge about or attitudes toward an issue, all sides of an argument should be fairly presented. This does not necessarily mean that there should be dramatic confrontation between diametric opposites. It does mean that, as a minimum, the evidence for opposing views should be fairly presented. Neither does this mean that the communicator should not present his own considered view together with the reasons for it. In fact, one of the necessary functions of a teacher or an administrator is to draw conclusions, take a stand, but it should be clear that this stand is taken after careful consideration of all points of view.

The second term in our model, the What, needs little further comment at this time. I hope I have left you with the impression that we have no nice neat package to present. In the absence of facts, there is no need to pretend that we know. We can present hypotheses, trends, hunches as long they are labeled as such and presented as tentative, awaiting data which will support or refute them.

The nature of the listener, the Whom in our model, is a critical factor. A good speaker always likes to know something about the type of audience he is confronting. So, too, we should keep in mind some of the salient characteristics of current students. But here again we must not categorize too generally. There is really no such thing as a typical student. Students vary on many parameters. The student's decision to use or not to use drugs will be based on a variety of motivations and expectancies and will differ from individual to individual and group to group. However, there are some general characteristics which apply to many students in many institutions. Most of them are intelligent, critical, and quick to question and to detect hypocrisy. These young people have been brought up in an age of the pill. Drugs are widely accepted as the cure for all ills. It should not be surprising that some of them turn to drugs in seeking individual solutions to or in avoiding problems with which our complex society confronts them. Growing out of the civil rights and anti-Vietnam involvements, there are an increasing number who are essentially anti-legalistic and feel that any law which is stupid or "immoral" should not be obeyed. In the majority of these students there is more of an intellectual commitment than a commitment to action, but they are forced by their position to support the right of others to take drugs even though they choose not to seek or accept the opportunity themselves, primarily because they have other strong values and motivations with which drug-taking is not consistent.

There is no one answer as to why students are interested in and take drugs, particularly the hallucinogens. Among those usually listed are curiosity, rebellion, the desire to improve social relations, to find meaning in life, to be reborn, to experience the cosmic, to expand consciousness. It is not productive to deny the feelings and motivations to which these drugs appeal. They exist. Are there other ways, legal and less dangerous, to respond to them? Is this not one of the challenges to education and educators?

COMMUNICATION WITH YOUTH

Joseph F. Maloney, Ph.D., Director, Urban Studies Center, University of Louisville, Louisville, Kentucky

Attention, frustration and deep discontent with contemporary living patterns are a widespread characteristic of our times, not of one generation.

But the discontented young are quicker than their elders to disown established patterns that offer no spiritual food. They are quicker because they are less rooted in the past.

Essentially, the young we tend to worry the most about are the rebels—the ones who reject not just our life styles, but us—us either as hypocrites or clods. Perhaps they are more conscious of our basic values—our spiritual principles—than we are. They are sensitive to the seeming contradiction between what we preach and what we actually do, how we actually live.

Last year the Urban Studies Center conducted a rather extensive study of the so-called generation gap, with surprisingly broad and intensive cooperation from the young adults themselves. The findings reveal a rejection of our life patterns by the young as being shallow, hypocritical and irrelevant to truly basic values.

Our generation—and the one before ours that shaped our attitudes—has been successfully preoccupied in producing wealth and in making staggering progress in the advancement of the physical sciences and mechanical arts. Presumably we did so to acquire the means to better carry out our underlying spiritual values. But to the young we have become exhausted through our efforts to acquire these physical powers, or so "programmed" in pursuit of wealth and a secure freedom from poverty that we have lost sight of our objectives, of our underlying values.

It's our generation that is hung up on manners and appearances—because we have had to struggle to obtain an economic and social status—a sense of social security. Our self-doubts are what account for our use of drugs in the form of sedatives—in alcohol—and in tobacco, which we know are dangerous and damaging to our health.

And we are hung up on race and sex—not the young. They are less concerned or troubled about sex than we. They rightly think us stupid for having done so badly in racial matters.

How many of us ever have two ounces of whiskey within two hours of driving a car? Was the Kinsey Report about our, or today's, young generation?

It's becoming common now to talk about a generation gap as a communication gap. I suggest that the communication gap is mostly one-sided. I suggest the young understand us better than we understand them—better than they communicate to us. They tune us in and understand our language, but we do not necessarily understand the words they use or the patterns with which they use words. More, they communicate in a style that we reject as outrageous, thoughtlessly rejecting their thoughts because they are not presented to us in our style.

Borrow the best of the Beatles' LPs—Sgt. Pepper's

Outline of talk made at a pilot workshop of The Drug Abuse Education Project held in Louisville January 1969.

Lonely Hearts Club Band. Listen to it carefully, but only after you have studied the words, which are printed on the album. "She's Leaving Home," "Within You, Without You," and "I Get By With A Little Help From My Friends" show—and our children understand—quite an insight into our problems.

They are not politicians, in that they are incapable of inventing and working diligently for a new system. They reject without being able to design a well-thought-out substitute. They are not philosophers because they cannot synthesize a comprehensive and systematic approach to life. They certainly don't talk like the politicians we are used to, and they don't produce logical arguments or rhetoric like our honored prose literature.

But they are poetical. They do have sharp insights into truth, which they do express very imaginatively and suggestively, rather than precisely. We made them poets. We subjected them to the TV, radios and radio media as the message that has molded their patterns of perception and intellection. The Saturday morning TV cartoons have exposed them to more mind-expanding fairy tales—talking animals and heroes seen as such—than we were exposed to. Bozo the Clown has had more influence on them than our grandparents and parents had time to read to us. Because we must have a commercial every six minutes or less on TV and every three minutes on the radio, they are accustomed to short, explosive communications. And the commercials themselves, the most expensive and professional communication form we have devised—are no more than 60 seconds. They see fast—they have been trained that way before they get to school. They see things in extremes—the commercial is punchy, and the interval between commercials is too short to develop complicated arguments or to distinguish shades of gray.

They understand our language style—but reject it. Rhetoric is boring. Distinctions are evasions. We take too long to say little—and much of what we say is trivial.

Look at the tremendous intellectual and spiritual problems teachers must wrestle with. Ladies may wear evening pants and party pajamas to presidential inaugural balls—but they are too risque for high schools. If a faculty prohibits slacks for girls they will merely confirm the not altogether unfounded student opinion that the faculty is from another world, a world of the past—a past irrelevant to modern life.

The students—the young—reject us as authorities—and they are right. In formal logic, the weakest argument is one based on authority. Our progress in science and technology and the contemporary contradiction between alleged principles and action —all should lead the young to question our behavior pattern as the ideal model. As teachers, we are successes not in proportion to the conformity of our students to our habits of dress, grooming or social action. Rather, we should assist them in questioning our behavior in the light of our fundamental principles. Some adults are quite good at presenting the two different points of view. This "translation" was done magnificently in "The Graduate," a high-grossing, but quite subtle movie—one the young understand very well indeed.

Drugs are a form through which the young can escape—from us. Let us help the young in their searches for a better way to live in accord with our principles. Let us give them love and understanding —with a hope, and a prayer, and a request directed at them as well as heaven. Let them do better than we have done in developing a life that adheres to basic spiritual values. If we love them let us love them for themselves—not as mirror images of what we think we are. We drive a few to drugs, more to despair and fundamental frustration and discontent. All of them need more of ourselves and less of our manners.

It's paradoxical. Our use of alcohol, drugs and even tobacco are all forms of escape through sedation. We worry about the young and their use of drugs, which are used for "mind-expansion." We can help steer them from their drugs if we stop living as if we preferred sedation. We must wake up and live in today's changing world instead of trying to sleep in the past—even the immediate past.

Youth will seek life. Let them find us among the living. Then—and only then—can we share life together.

Presented below, as examples of modern songs, are some from the Beatles "Sgt. Peppers Lonely Hearts Club Band".

"She's Leaving Home"

Wednesday morning at five o'clock
as the day begins
Silently closing her bedroom door
Leaving the note that she hoped would say more
She goes downstairs to the kitchen
clutching her handkerchief
Quietly turning the backdoor key
Stepping outside she is free
She (We gave her most of our lives)
is leaving (Sacrificed most of our lives)
home (We gave her everything money could buy)

She's leaving home after living alone
For so many years. Bye, Bye
Father snores as his wife gets into her
dressing gown
Picks up the letter that's lying there
Standing alone at the top of the stairs
She breaks down and cries to her husband
Daddy our baby's gone.
Why would she treat us so thoughtlessly
How could she do this to me.
She (We never thought of ourselves)
is leaving (Never a thought for ourselves)
home (We struggled hard all our lives to get by)
She's leaving home after living alone
For so many years. Bye, Bye
Friday morning at nine o'clock she is far
away
Waiting to keep the appointment she
made
Meeting a man from the motor trade.
She (What did we do that was wrong)
is having (We didn't know it was wrong)
fun (Fun is the one thing that money can't buy)
Something inside that was always denied
For so many years. Bye, Bye.
She's leaving home Bye, Bye.

"Within You, Without You"

We were talking—about the space
between us all
And the people—who hid themselves
behind a wall of illusion—
never glimpse the truth—then it's far
too late—when they pass away.
We were talking—about the love we all
could share—when we find it
To try our best to hold it there—with
our love
With our love—we could save the world
—if they only knew.
Try to realise it's all within yourself
no-one else can make you change
And to see you're really only very small,
and life flows on within you and without
you.

We were talking—about the love that's
gone so cold and the people
Who gain the world and lose their soul—
they don't know—they can't see— are
you one of them?
When you've seen beyond yourself—
then you may find peace of mind is
waiting there—
And the time will come when you see
we're all one, and life flows on within
you and without you.

George Harrison

Courtesy of Capitol Records, Inc. and Electric & Musical Industries, Ltd.

THE DRUG DILEMMA: A PARTIAL SOLUTION

Sidney Cohen, M.D., Director, Division of Narcotic Addiction and Drug Abuse, National Institute of Mental Health

The Parents

One of the great myths of the day is that if a child goes wrong, becomes a drughead, for example, this must be due to parental failure. If the cause is not deprivation or neglect, it must be overprotection or possessiveness. At times it appears that the line between insufficient mothering and maternal smothering is nonexistent. This peculiar notion stems from the strong lay and professional indoctrination with the Freudian tenet that what happens in infancy determines subsequent behavior.

Unquestionably, substantial numbers of children are maltreated, abused, overcontrolled, or spoiled. This does not mean that they are completely incapable of overcoming these childhood handicaps. The individual has some responsibility in such matters. In addition, a large group of quite well-brought-up, characterologically sound children are turned on to drugs by their associates. It is difficult to discern how a parent can be blamed for these events.

Somewhere between "I don't care" and overprotection is the parental attitude which best permits the child to develop and grow up. He grows by solving problems, by learning from failure and defeat as well as from success and reward. This opportunity to become resilient by encountering and coping should not be denied any growing creature. When help is needed, the parent-child relationship ought to be so open and trusting that it is used for assistance, information, and advice. This is just as true for the issue of drug taking as for every other problem. Naturally, it would be best if drug usage could be discussed before the event, but the youngster should feel capable of talking about it afterward without fear of excessive emotionality or rejection. An open attitude need not mean acceptance of an act which the parent considers harmful. Approval is withheld, but condemnation should not be on an irrational basis. Sufficient data are at hand to point out quietly the personal, legal, and social hazards. Most often a single experience with drugs represents nothing more than the exploratory behavior of youth. If drug taking becomes habitual, it usually represents either a gratification which the young person should have been able to derive from daily living or an evasion of life experience due to inability or unwillingness to meet life's day-to-day rebuffs.

Those most attracted to drugs are those who are bored, cannot enjoy, or cannot tolerate stress and frustration. The drug fits their emotional discontent and removes the necessity to plan, to struggle, to endure.

The parent who drinks to excess will have an impossible task in persuading his son or daughter to desist from drug usage. It is true that his act

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is legal and his child's is not. Nevertheless, the legality of alcoholic intoxication is not a strong argument to a child—or anyone else. Harsh and punitive attitudes makes some children compliant, but many others rebel and become more involved in drugs as an act of defiance. Making obviously untrue statements about drugs is worse than useless. The child will tune out those who are patently trying to frighten him into desisting.

A difficult situation occurs when the young person is part of a group of drug users. Its members reinforce each other's drug taking. They become authorities and can outtalk parents. They may go on for some time before anything untoward happens. In such an instance a parent can hardly expect his child to abstain unless their relationship has been an unusually good one. What is more likely is that a critical moment will arise when the parent can step in and effectively help his child to stop using drugs. This moment occurs when someone in the group is hurt, arrested, or decides to break away from the drug scene for philosophic or personal reasons.

The parent has a final responsibility which he cannot delegate to the school, the court, or the psychotherapist. However, he may have such feelings of guilt (sometimes unjustified) when his child becomes a "head" that he continues to support his offspring's deviant way of life. The parent is not necessarily guilty for a youngster's character deficit. Other people and circumstances have had powerful impacts on his character formation, too. It does not seem logical to underwrite an undesirable drug habit. Rather, the attitude should be, I love you and I will help you, but I won't support you if you persist in behavior which I believe to be detrimental to you.

Should a parent ever report a child's illegal behavior to the police or commit him for mental hospitalization? This question can only be answered on a highly individual basis. If the youngster is involved with physically addictive drugs and will not voluntarily seek help, it may become necessary to take over the decision-making responsibility. If one's offspring has become a pusher, it may be justifiable to notify the authorities. Certainly, if he has broken with reality and has no insight into his condition, commitment to a hospital may be the only proper step. Much depends upon his age; if he is a minor, the parental responsibility is greater.

Most of the arguments which youngsters use to justify their bedrugged episodes are specious. Others are partially true, and a few are valid. The most convincing statement that can be made is your way of living. Striving for security, so important in times of hardship and poverty, is an inadequate goal during periods of relative affluence. Those of our middle-class children who do not need to struggle to obtain food and shelter find such an outmoded aspiration unacceptable. It is a feeling of existential meaninglessness which attracts some people to the drug state. The acquisition of a sense of meaningfulness is the antidote.

Sometimes a young dropout wants to drop back in after a year or two of the hippie game. The family relationship ought not to be so embittered that he cannot ask for help to find his way back. A line of communication should be available to him.

The School

It seems reasonable to insist that usage or trafficking of any illegal drug not be permitted on school grounds. Furthermore, psychological dependence upon mind-altering psychedelics, stimulants, sedatives, and intoxicants is contrary to the goals of the educative process, whether excessive use be on or off campus. If a place of learning is where one's intelligence, capabilities, and skills are developed and enhanced, then habitual displacement of consciousness, reality testing, and reasoning ability is antithetical to its goals. The frequent use of any drug can result in impaired performance. Indeed, a single use of some classes of drugs is associated with a temporary decrement in psychomotor functioning. Of all drug users, only those who indulge in the psychedelics claim consciousness expansion. From the observations of many who have studied this issue and from the reports of many who have gone the psychedelic route for years, chemical consciousness expansion is, in the main, a myth. The so-called revelations and enlightenments are all too often illusory.

If the educator is to learn anything from the current striving for drug-induced perceptual, emotional, and cognitive changes, it is that important areas of human experience have been neglected by our child-rearing and child-teaching practices. Many of those attracted to the drug experience suffer from *anhedonism,* the inability to derive pleasure from ordinary existence, and *alienation,* the inability to find a meaning within or outside oneself. These are serious deficits, and in a young person they lead to serious disorders of behavior or character. From childhood through adolescence we are failing (1) to provide goals appropriate to our times, (2) to train the emotions and the senses, and (3) to set limits.

Therefore, goallessness, an inability to enjoy, and an attenuated sense of social responsibility predispose to chemical escape, chemical hedonism, and the search for chemical enlightenment.

The teacher, in addition to making the educative process as interesting, constructive, and alive as possible, can also have a great influence on the decision to take or continue to take drugs. He is often the confidant when parents are lacking or have failed to accept their role. The teacher may be the first to learn of, or notice, aberrant behavior due to drugs. He may be able to persuade his pupil by presenting factual information.

In schools where the administration believes that no drug activity is present, there may be reluctance to rock the boat by opening up the subject. The likelihood, though, is that more drug activity is going on than comes to the awareness of the authorities. The teacher, as a more neutral person than the parent, can counsel or refer the student to a counselor. A school counselor may form a group of students involved in drugs. One or more students who have passed through their drug honeymoon and have come back are very helpful in such situations.

One element that must be emphasized in all discussions about drugs is that their use is stupid, not smart or "in." The regular user even of nonaddictive drugs is in a state of maturation arrest. The drug solves his problem; he does not learn to solve problems and endure dissonance in his environment. Many drugs leave the student goofy, unable to function. This is hardly a groovy way to exist. Those drugs which are supposed to expand one's consciousness all too often fail to do so, especially if one is young and unprepared.

The growing brain is more vulnerable to all chemical agents, and temporary, perhaps even sustained harm can result. Permanent harm to the brain cells after exposure to large amounts of psychedelics is a possibility that is now undergoing intense study.

It is in peer groups that drug-taking spreads. The teacher may become aware that one or a few individuals are proselytizing. An epidemic may be prevented by quick action in such instances. School authorities should make the school area a difficult place to obtain or use drugs. It is too much to expect that school authorities can be responsible for activities off the campus.

The question of confidentiality rarely comes up, but it may. If a student approaches a teacher as a friend to discuss his drug problem, he must be warned about the teacher's duties in the matter. It is to be hoped that it will be possible to listen without disclosing, but school regulations may prevent this. Under such circumstances the student must be clearly told beforehand. A certified school psychologist or psychiatrist has the advantage of being able to keep patients' statements as privileged communications. Referral to such a person will safeguard the student.

A repertoire of disciplinary measures with some built-in flexibility is preferable to rigid, mandatory punishments. The campus supplier of LSD and Methedrine is not in the same category as the youngster who has been persuaded to try a "reefer" and whose negligence has resulted in his detection. Strangely enough, the penalties for both offenses are equal—they are felonies. Unfortunately, school authorities may have no choice in the matter. They are often required to report every breach of discipline. It may be well to make students aware that a felony involves lifelong consequences beyond incarceration. This should not be done as a threat, but rather as part of setting forth the realistic here-and-now risks connected with the misuse of certain drugs.

The Therapist

All too often the psychotherapist is faced with a young patient who does not want to be treated, but who has been forced into the office by anxious parents. Little can be done if the patient is not motivated to change. All too often he is at a phase of his drug-taking cycle when he is deriving satisfaction, euphoria and release of tension from the chemical he is using. He is feeling no pain; what more can therapeutic intervention offer? If it happens to be one of the psychedelics, he has a feeling of subjective wisdom far beyond that of the therapist. He has a pseudo-philosophic jargon which can put many a therapist down. If, somehow, the patient cannot be motivated to examine himself and his reasons for overusing drugs, little can be accomplished. The patient is unlikely to remain in treatment, and it is the parents who should be counselled about their attitudes at this point.

Sooner or later, after a few bad trips, a psychotic break or disillusion with the drug way of life, the patient will want out. Perhaps it is merely that he sees the circular, pointless nature of his existence. At this moment the skilled therapist who knows something about the nature of the psychedelic experience can perform a valuable service. It is not a matter of starting anew; the drug experience of the past months or years must be carefully examined to learn as much as possible from it. Thus a bridge is built that leads the patient back into an enjoyment of this world and a living of this life in the best possible manner. These are the most difficult of patients for they were engulfed in the psychedelic life because of their unfulfilled needs. They have tasted great gratifications in their responsibility-free, hedonistic existence. Now the therapist must help them become more responsible, find more significant goals and begin the long hard process of psychological maturation. The immaturity which caused them to seek the magic pill must be modified. These are valuable people, often very bright, and with many contributions that they can make. After a period of individual therapy a psychotherapeutic group may be at a place where they can find the values of the human interaction.

The Legislator

The control of the drugs mentioned in this book is necessary, especially for the juvenile. Passing laws can have a beneficial or a harmful effect depending upon the wisdom of the legislation. With the current upsurge of drug misuse especially in those of school age, it would seem reasonable to apprehend the supplier of these minors rather than to focus on catching the juvenile user or possessor. The maker, the smuggler, the pusher and the transporter must be found and punished. The penalties for use and possession of a drug like marijuana are excessive. Marijuana, a weak hallucinogen, is punishable with penalties greater than LSD at this time. Consideration ought to be given to proposals to place marijuana on the dangerous drug list rather than under the Narcotics Act as at present.

The mere passage of laws, of course, as a device to eliminate noxious behavior, is an ineffective technique. The hope that a decree will abolish undesirable conduct in a democratic society is just as naive as the expectation that a chemical potion will magically change character. What is needed in addition to sagacious laws, is public education and public cooperation with the laws. Somehow these must also be obtained.

*Puncture of a Myth**

A scrutiny of the past suggests that the abuse of novel mind-altering drugs tends to be cyclic, with a rise and a fall which is not clearly perceived except from a distance. The proposition that we have experienced periodic surges and declines in drug-taking behavior before is no plea for complacency. An active effort to teach the individual and society how to enjoy and endure without euphoriants and escapants is essential. Setting the drug-abuse problem into a historical perspective simply avoids the myth that things were never as bad as now. This myth happens to be prevalent among the drug subculture. It betrays a profound and potentially disastrous ignorance of the history of man.

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* *Cyclic Psychedelics* by Dr. Cohen, *American Journal of Psychiatry*, September 1968.

PROGRAM RECOMMENDATIONS FOR ELEMENTARY TEACHERS

Recommended by a Team of Kindergarten through Third-Grade Educators in Marin County, California June, 1968

Introduction

Education that will prepare a child to avoid drug abuse in a drug-using culture must begin at an early age. It will need to include both process and content in order to counteract potential drives to drug abuse as well as youthful ignorance about drugs and their potential effects.

Intensive teacher education is essential if teachers are to respond to children's questions with certainty and assurance, avoiding the exaggeration, distortion and sensationalism that nullifies effectiveness of educational efforts.

The best deterrent to drug abuse is thought to be an individual's own value system and his assessment of what physical damage might result from drug use. There are a variety of ways to present information and instruction in these areas, and the suggestions herein are not intended to be exhaustive but merely to indicate the scope of the subject and to suggest approaches and a point of view. Teachers will build upon the ideas presented here, applying their own versatility to them.

Teacher Education

Teachers' information concerning dangerous drugs should include the following:

1. Facts—Teachers should be informed on what is fact and what is non-fact in the drug area. For example, they should be aware that:
   a. The long-range physical and mental effects of marijuana are not fully understood, although widely varying assertions are made offering extreme points of view.
   b. Use of illegal drugs is reported by law enforcement representatives to be moving from ghettos to increasing incidence in affluent societies.
   c. Dangerous drug use is the principal reason for 25% of the arrests of children under fifteen. It accounts for 16% of the arrests of those eighteen and older.
2. Courses—Although primary teachers have limited occasions to impart specific drug information to their students, the need seems to be increasing. It is therefore recommended that primary teachers take courses in drug information.
3. Reading—Teachers are encouraged to consult and keep up with the books and other literature published concerning drug abuse. While reliable information about drugs currently used by youth is a little difficult to obtain and evaluate, educators must strive to keep abreast of the constantly changing drug scene.
4. Attitude—Abuse of drugs frequently stems from feelings of inability to communicate, to be an integral part of the world. Real personal honesty, self-awareness and comfort with emotions are essential to effective communication.

> Becoming more prevalent are workshops which lead toward these communication skills. They are variously called "encounter groups," 'awareness groups,' or 'sensitivity training.' Their purpose is a deep, continuous experience with communication. A beginning to the development of communication abilities can be obtained through the book, *Between Parent and Child,* by Haim Ginott.

Oftentimes the most important and best-remembered teaching is that which occurs incidentally, perhaps involuntarily. In the area of drugs, teachers need to be prepared to respond correctly and with naturalness to frequently impromptu questioning.

While specific teaching on the drugs most frequently abused is likely to occur in the primary grades only in response to children's specific questions, the teacher needs a good background in the intelligent and wise approach to drugs. With it he can prepare children to face and absorb the variety of information that will reach them later on.

The approach to teaching about drugs should be in terms of understanding of and respect for substances, not in a scare context. Poison prevention is taught in the primary grades as well as later. Again, without applying scare tactics but by dealing in facts, a teacher might discuss such things as the overdose of a commonly available substance such as aspirin. Actual experiences can be used to explain the functions of substances.

Whenever medications are discussed, proper use and the need for direction from a physician in using them should be explained. In a context of discussing home safety, the teacher might discuss reasons medicines should not be left out and available. Similarly, class discussion can include the need for ventilation when using glue.

Teaching Strategies Relating to Drug Education

Certain personality characteristics have been observed in young people who have abused drugs. These individuals have generally been described as showing or having shown problems in communication, passivity and low frustration tolerance, lag in social development, qualities of emptiness and apathy, to be isolates, poor relationships with peers, and to be exploitive of adults, impoverished in inner resources, and desirous of outside stimulation. Further, it has been noted repeatedly that the recurring cry from children is adult failure to accord them dignity and to be honest with them. Accordingly, optimum teaching strategies should aim to foster development of the whole child through such precepts as the following:

1. Avoid producing guilt, which acts to reduce one's sense of personal worth. Encourage free verbal expression of any emotion.
2. Accept emotion. Emotions are real and compelling. Suggesting alternate ways of handling crisis situations is preferable to suppression or repression of vividly experienced feelings. Discussion of such feelings is advantageous.
3. Know the child. Efforts made to become personally acquainted with the child will be invaluable. Acquaintance with the parents of each child helps in this understanding. It is worth keeping in mind that older children have complained repeatedly and bitterly that they experienced a loss of individuality in their school experience.
4. Encourage choices. The act of making decisions is something in which children could use much more practice than they get; opportunities for affording this are infinite. For example, "Do you want the blue paper or the red paper?" or "Do you want to do this problem or that one?," etc. Such activity is important in the development of a feeling of individual worth.
5. Be self-aware. Awareness and acceptance of one's own temperament and style sets a valuable example to children. It is no more desirable for the teacher to be depersonalized than for the child. By being himself, the teacher sets an example—teaches by precept—a great lesson in self-acceptance.
6. Know your rights. It is a corollary to #5 to teach by precept that one can demand one's own rights in situations. The child cannot take all the teacher's attention, nor all of the teacher's time, nor does he really want it though he may try to get it. A teacher will help the child by assisting him in finding limits in his demands on the teacher's time as well as by setting limits on behavior.
7. Imaginary adventures and excursions. Such activity is useful in developing inner resources as well as helping children to distinguish between objective and subjective reality. Such activities (which may be based on actual experience, musical experience, a picture, etc.) should not be confined only to kindergarten, but should be enjoyed throughout the primary grades.
8. Perception—broadly and intensively consid-

ered, multi-sensory. Increasing work is being done in visual perception, but this can be greatly expanded and enriched. Experiences in perceiving and reporting what is seen, heard, tasted, smelled or touched and kinesthetic experiences of lifting, pushing, pulling, etc.—all these contribute to a sense of selfness.

9. Learning to evaluate—This activity cannot be begun too early. Children need to become critics in the present-day world with its onslaught of stimulating experiences. Discussion of TV shows and their accompanying commercial messages is one method of encouraging evaluations.
10. Role-playing and creative drama—the experience of putting oneself in someone else's shoes as well as imagining situations helps in the child's development of his own individualism.
11. Appreciation of learning. Review with a child of the things he has learned and of their possible usefulness or relevance to his life helps to place them in a meaningful and favored context. Corollary to this, it might be commented that explanations to children prior to teaching them something—a unit or skill, for example—can give a child more reason for trying to learn the material than simply presenting material to be learned because the teacher ordains it.
12. Including the student in the evaluation portion of a parent conference gives him knowledge of what is said and opportunity to contribute. This may help to allay possible feelings of insecurity or guilt in the child.

HOW CAN WE TEACH ADOLESCENTS ABOUT SMOKING, DRINKING AND DRUG ABUSE?

Godfrey M. Hochbaum, Ph.D., U.S. Public Health Service

For thousands of years man has found a variety of means to cope with the drudgeries, pressures, boredom, and fears of every-day life. The need for such means is an inseparable part of human nature, and only the form and use of these means have changed from one culture era to another.

In short, smoking, drinking, or the use of various drugs can under certain conditions serve some constructive, useful, and satisfying purpose. I believe they can be normal activities and should be approached as such rather than as abnormal or as necessarily due to some abnormality in the people using them.

The reason we disapprove of them and attempt to control their use is that the benefits, pleasures, and satisfactions they may yield are outweighed by the health hazards they create for the user and in many cases by their threat to a healthy society.

According to a number of studies, smokers, including adolescent smokers, report that cigarettes help them to relax, concentrate, tolerate anxiety, feel more at ease in awkward situations, and so forth. Such benefits are reported with such frequency and consistency that we cannot doubt their validity. Just because these benefits may be psychological does not diminish their reality or their importance to the smoker.

We can say the same about drinking. Some boys drink because under the influence of alcohol they are able to shed inhibitions, uncertainties, or feelings of inferiority and begin to feel free, manly, and reckless. The fact that excessive drinking engenders a variety of health and safety hazards should not obscure the fact that the drinker may enjoy it and even temporarily benefit from it in some ways.

The nonsmoker or nondrinker often finds these facts difficult to understand and believe. He tends to see only the negative, unhealthy, dangerous side. When he is called upon to teach children about such matters, he will tend to present a one-sided picture which conflicts with what many of the children think, do, and experience. Indeed, even educators who may themselves smoke or drink occasionally often focus on the unhealthy and hazardous aspects of these habits, in their well-meaning zeal to convince children of the risks they are taking and of the benefits they can reap from abstention, and disregard or even deny any pleasures or satisfactions that may be obtained from them. Such an attitude can obviate any hope of educational success, and such an approach backfires easily and often. A person's strongly held beliefs and attitudes are rarely changed by a one-sided, aggressive attack on them. Indeed, as often as not, such an approach tends to reinforce the original beliefs and attitudes. A more balanced approach, which, instead of attacking a person's beliefs, guides him to examine and reassess them himself, is more promising. In other

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words, educational efforts should present all sides of the argument fairly, give all the known facts and aspects, and attempt to stimulate the student to play the role of the final arbiter—hopefully led by the educator to do so intelligently and with a sense of responsibility for his own well-being.

As long as we harp on the evils and hazards of smoking, drinking, marihuana, LSD, or sex and deny the pleasures and satisfactions that some adolescents derive from them, these adolescents will think—and perhaps openly say—that we do not know what we are talking about. Our educational efforts will seem unreal to them since what we tell them does not fit reality as they see it and as they themselves have experienced it.

The same holds true for classroom instruction. Unless the teacher can present his topic—be it smoking, excessive use of alcohol, abuse of drugs, sex or what have you—in all of its aspects and dimensions, positive and negative, good and bad, desirable and undesirable, he will lose many of his students. Adolescents, because they are in a period of life where they search out and examine many issues which adults have come to view as settled, are very sensitive to lack of candor, to incomplete presentation of facts, and to biased attempts to lead them. They reject quickly, readily, and totally a source of instruction, be it a person or presented material, if they doubt its reliability, honesty, and sincerity.

Visualize a child who is told in school about the bad effects of drinking but knows that his mother has a cocktail ready for his father when he comes home, which (as the child may hear often) helps him relax after a hard day's work and be a more pleasant person to have around. In such a case, the child has somehow to resolve the conflict between what his teacher tells him and what he sees to be the facts of the outside world.

Another difficulty arises when the teacher attempts to affect the child's behavior by appealing to motives and standards which are less meaningful to him than those offered by his peer groups and other influences and which he may neither share nor accept.

For example, in driver education courses, we stress the hazards of driving at excessive speeds. We regard this emphasis on the risks of such driver behavior as a powerful deterrent because we adults value our health and our lives and usually avoid exposing ourselves unnecessarily to dangers. But for many adolescent boys, this thrill of taking risks and of thereby proving one's manhood and impressing girls and other boys is titillating, desirable, and satisfying. Therefore we actually appeal to values which for us are persuasive reasons to drive carefully but which for many boys are equally persuasive reasons to do exactly the opposite. Honest puzzlement is the response we must expect when we use our own values as arguments with adolescents who do not share and may not even understand these values.

Smoking, the use of alcohol or of hallucinogens, and other similar activities have become symbols of rebellion against established adult standards and authority. It is in the nature of rebellion that disapproval and repression strengthens and intensifies the movement. Forbidding smoking or prosecuting a boy for using LSD could easily make these things seem even more important and desirable to some adolescents. There are risks involved when we fail to understand the thinking and the attitudes and values which are characteristic of adolescents.

Scientific facts, no matter how convincing they may seem to us, often fail to persuade children. One reason is that facts, even when learned, are viewed within the framework of existing motivation, feelings, and emotions. Facts that are in accord with what one already accepts, are accepted; facts that run counter are frequently rejected, quickly forgotten, or interpreted in such a way that they are more in line with what one wants them to mean. Thus, to the person who is already motivated to take some preventive action against a given disease, an additional incentive is provided by telling him that one million Americans die every year from the disease because it was not diagnosed early. But the person who for one reason or another rejects such preventive action may reinterpret the same statistics as meaning that many more millions do not contract this disease, and thereby obtain additional justification for not taking the action.

Clearly, knowledge of facts by itself does not necessarily change attitudes, beliefs, or behavior. Much depends on how and in what context such facts are presented.

This poses a difficult problem, particularly in respect to such controversial, emotionally potent problems as drinking, smoking, and the abuse of drugs. Knowledge gained in the classroom on these subjects is valuable, even essential. But one cannot rely on this alone if one wants to assure that the facts are accepted and applied by the students to their out-of-school behavior.

Once we have come to understand the complexity of the problem, we can turn to ways of dealing with it more effectively than if we shut our eyes and think it is just a question of giving people more information with the notion that knowledge will do the trick.

I would like to illustrate how one can draw logical and practical implications from our knowledge about adolescent health behavior. The following will not attempt to represent all possible implications. It will only illustrate how one might go about drawing such implications.

We have seen that the habits with which we are concerned do provide the adolescent with a variety of pleasures and satisfactions and fulfill certain needs. Once we acknowledge this fact, it may be possible to identify other, less hazardous ways by which adolescents could obtain the same benefits and pleasures. Here again, one must be cautious not to impose the adult's viewpoint but to stimulate and guide adolescents to generate their own ideas and develop their own means of accomplishing this end. If they invest their own efforts and their own creativity, they will be much more likely to follow through and to draw their peers into such activities.

Secondly, we talked about some teenage behavior as both a demonstration of being grown-up and an expression of rebellion against adult authority. Both of these usually do not really begin to occur until the early teens. By that time the child is exposed to a multitude of social influences from his peer groups. These often influence, stimulate, and reinforce undesirable health habits and frequently prove more powerful than any instruction on smoking, drinking, or drug abuse that the school may offer at the same time.

However, if we began to instill in the child proper attitudes and values with respect to these habits long before adolescence, we could fortify and help him resist such influences later. Take, for example, tooth brushing. The child learns to brush his teeth long before he understands the health reasons. When he is old enough to learn and understand the health reasons, he can easily accept them because they fit in with an already established habit. In fact, they help to strengthen the habit. In the same way I believe that by proper means we can instill in children certain attitudes and ways of looking at smoking and drinking when the child is still very young. It can start with using doll play in pre-school years, and it can go through all the school years. By the time the child becomes a teenager, there would have developed within him an ingrained way of looking at such matters. As he becomes exposed to other influences toward smoking, drinking, and similar behaviors, these influences will be contrary to his normal way of thinking. Therefore, education in this area should start as early as possible—both in the home and in the school.

Thirdly, direct attacks on people's attitudes and habits often fail and actually arouse resistance. Actually, the harder we attack, the more obstinate and the more extreme these views often become. But if influences could be brought to bear on such a person more subtly and without his being conscious of being "attacked," he will be more receptive.

Schools have many opportunities to do just this. Long before formal instruction on smoking or alcohol or drug abuse is offered—and such courses clearly are (or at least are seen by many students to be) direct and authoritarian attacks—more subtle influences could be exerted.

For example, physical education courses offer many opportunities to insert references to the effects of cigarettes and alcohol on physical fitness and attractiveness. Other courses could do the same. History is full of illustrations of battles lost, empires disintegrated, leaders defeated because of indulgence in various detrimental health habits. Courses in biology allow references to the physiological effects of nicotine and alcohol.

If such educational messages are systematically planned with the cooperation of the entire school staff, attitudes could be created long before adolescence which could enable many children to resist temptations they will be exposed to during their adolescent years.

We have seen that facts alone are not decisive factors in changing attitudes or behavior, but they could be if presented in a context that makes them meaningful. For example, statistics offered in the classroom on accidents and deaths resulting from driving under the influence of alcohol or the number of people dying each year from lung cancer will not have much impact on teenagers. In fact, demonstrably it does not even have much effect on us adults. Highway statistics on how many people die during Labor Day weekends on the highway have not led many drivers to drive more carefully. But one can observe that drivers, after passing the scene of a smashed car, slow down. People change attitudes or behavior very rarely on the basis of statistics. They change their attitudes and behavior in response to personal experiences.

In relation to school health education, visits to hospitals to see cancer patients or having an emphysema patient visit the classroom may have more impact than all the statistics. A teenage boy who was crippled in an accident while driving under the influence of alcohol will be more persuasive than a booklet. In short, the more immediate and personal a demonstration is, the more effective the facts themselves will become.

There is some evidence that many adolescents take up smoking or drinking or drugs, not because they particularly want to or enjoy it, but because they consider it a mark of adulthood, or because they believe that it gives them some status among their peers or in the eyes of the other sex, or because other teenagers talk them into it. Many of these young people may be glad to give it up if they just knew how they could do it without losing face in the eyes of their peers or without surrendering some of these benefits.

These boys and girls would probably be quite responsive to any help teachers can give them. In some schools, clubs or other organizations are formed which do not actually forbid smoking or drinking but deliberately create an atmosphere in which such activities are considered childish or stupid and are frowned upon. If such organizations can be made attractive and prestigeful in the eyes of enough students, those who do not choose to smoke or drink in the first place and those who are eager to shed such habits can find a congenial peer group which provides them with a good deal of social reinforcement.

There are many who do not engage in undesirable health habits but are on the verge of yielding to the temptation to try one or another. Psychological research has shown that during this period of indecision, almost any influence may suffice to swing the decision one way or another. It is this group with which medical and other facts may have a decisive influence.

Then there are youngsters who really are already captives to their habits; they may already have become habituated to and acutely dependent on cigarettes, alcohol, marihuana, or what have you. Some of these one will find totally and completely adamant to any attempt to change their habits and one may have to forget about them. But others may indeed have tried but found it impossible. These boys and girls need and should be provided help with the problem through individual counseling or perhaps some sort of psychotherapy.

We referred earlier to the difficulty of making classroom learning relevant to the outside life so as to provide for a carry-over to the latter. One of the reasons mentioned is that many children—and particularly those who represent our most difficult problem cases—see the classroom as a world separate from the real world in which they live. Since this image is hard, perhaps impossible to change, it might be easier to change the situation. One might, for example, consider discussion group approaches instead of the more typical lecture approaches of the classroom and move from the classroom setting to more informal settings. What if groups were assembled in homes of teachers or children, in fraternities or dormitories, or in other places which do not have a school atmosphere? The teacher or other experts could function as resource persons while the discussions were led by students themselves. In fact, the more closely both the physical environment and the style of instruction maintained in such groups resembles situations in which these adolescents usually move and in which they are exposed to undesirable influences we wish to counteract, the more effective the discussions are likely to be.

Psychosocial research of the last few years has helped us to understand somewhat better why adolescents smoke, drink, or abuse drugs. This new understanding has taught us that there are no simple explanations nor single or simple answers. But if we carefully analyze these problems and search for appropriate implications from the psychological and sociological sciences, we can generate new ideas as to how to cope with the challenge.

2/ FACTS ABOUT DRUGS

WHAT IS MARIHUANA?

Marihuana is a drug found in the flowering tops and leaves of the female Indian hemp plant, *cannabis sativa.* The plant grows in mild climates around the world, especially in Mexico, Africa, India, and the Middle East. It also grows in the United States, where the drug is known by such names as "pot," "tea," "grass," "weed," and "Mary Jane."

The drug is made by crushing or chopping into small pieces the dried leaves and flowers of the plant. This green product is usually rolled and smoked in short cigarettes or pipes, or it can be eaten mixed with food. The cigarettes are commonly known as "reefers," "joints," and "sticks." The smoke from marihuana is harsh and smells like burnt rope or dried grasses. Its sweetish odor is easily recognized.

The strength of the drug differs from place to place, depending on where and how it is grown, how it is prepared for use, and how it is stored. The marihuana available in the United States is much weaker than the kind grown in Asia, Africa, or the Middle East.

What is its use?

Marihuana is one of the least understood of all natural drugs, although it has been known for nearly 5,000 years. According to a UN survey, it has been most widely used in Asia and Africa. Very early in history, the Chinese used it to relieve pain during surgery, and the people of India used it as a medicine. Today it is used mainly for its intoxicating effects and has no known use in modern medicine.

Traffic in and use of drugs from the cannabis plant are now legally restricted in nearly every civilized country in the world, including countries where marihuana is used in religious ceremonies or as a native medicine.

How widely is it used in the United States?

The use of marihuana as an intoxicating drug was introduced in the United States in 1920. In 1937, the Federal Marihuana Tax Act outlawed its general use and every state followed with strict laws and enforcement. In the mid-1960's, authorities reported a sharp increase in the use of marihuana. Arrests on marihuana charges have more than doubled since 1960, according to the President's Commission on Law Enforcement and Administration of Justice.

No one knows the exact extent of marihuana use in the United States. Some health authorities believe that 4 to 5 million Americans may have used the drug at least once in their lives. Other estimates are as high as 20 million. Research studies are under way to determine more precisely just how widely the drug is used.

How does the drug work?

When smoked, marihuana quickly enters the bloodstream and acts on the brain and nervous system. It affects the user's mood and thinking, but medical science still has not discovered just how the drug works in the body, what pathway it takes to the brain, and how it produces its effects. Some scientists report that the drug accumulates in the liver. Because it may cause hallucinations when taken in very large doses, it is classed as a mild hallucinogen.

What are its physical effects?

The long-term physical effects of taking marihuana are not yet known because no one has done

Reprinted from pamphlets produced by the National Institute of Mental Health—*Narcotics* (PHS publication #1827), LSD (PHS #1828), Marihuana (PHS #1829), The Up and Down Drugs (PHS #1830).

the kind of research needed to learn the results of chronic use. The more obvious physical reactions include rapid heartbeat, lowering of the body temperature, and sometimes reddening of the eyes. The drug also changes blood sugar levels, stimulates the appetite, and dehydrates the body. Users may get talkative, loud, unsteady, or drowsy and find it hard to coordinate their movements.

What are its other effects?

The drug's effect on the emotions and senses vary widely, depending on the amount and strength of the marihuana used. The social setting in which it is taken and what the user expects also influence his reaction to the drug.

Usually, when smoked, the drug effect is felt quickly—about 15 minutes after inhaling the smoke of the cigarette. Its effects can last from two to four hours. The range of effects can vary from depression to a feeling of excitement. Some users, however, experience no change of mood at all. The sense of time and distance of many users frequently becomes distorted. A minute may seen like an hour. Something near may seem far away.

How does marihuana affect judgment?

A person using marihuana finds it harder to make decisions that require clear thinking, and he finds himself more responsive to other people's suggestions. The drug has an adverse effect on any task that takes good reflexes and thinking. For this reason it is dangerous to drive while under the influence of the drug.

What are the latest findings about the drug?

Working with man-made tetrahydrocannabinol, one of the active ingredients of marihuana, a leading scientist recently found that high dosages of the drug brought on severe reactions in every person tested. The National Institute of Mental Health study also showed that psychotic reactions sometimes occur, for unknown reasons, in some individuals who take smaller amounts.

The scientist observed that a dose equal to one cigarette of the United States type can make the smoker feel excited or silly. After an amount equal to four cigarettes, the user's perceptions change. Colors seem brighter, and hearing seems keener. After a dose equal to 10 cigarettes, other reactions set in. The user experiences visual hallucinations (seeing things that are not there), illusions (seeing or imagining shapes in objects that are not there), or delusions (beliefs not based in reality). His mood may swing from great joy to extreme anxiety. He may become deeply depressed, or have feelings of uneasiness, panic, or fear.

Is marihuana addicting?

Authorities now think in terms of drug "dependence" rather than "addiction." Marihuana, which is not a narcotic, does not cause physical dependence as does heroin or other narcotics. This means that the body does not become dependent on continuing use of the drug. Neither does the body, probably, develop a tolerance to the drug, which would make larger and larger doses necessary to get the same effects. Withdrawal from marihuana does not produce physical sickness.

A number of scientists think the drug can cause psychological dependence, however, if its users take it regularly. All researchers agree that more knowledge of the physical, personal, and social consequences of marihuana use is needed before more factual statements can be made.

Does it lead to use of narcotics?

A 1967 Lexington study of narcotic addicts from city areas showed that more than 80 percent had previously used marihuana. Of the much larger number of persons who use marihuana, scientists agree that few go on to use morphine or heroin. No direct cause-and-effect link between the use of marihuana and narcotics has been found. Researchers point out, however, that a person predisposed to abuse one drug may be likely to abuse other, stronger drugs. Also, users of one illicit drug may be exposed to a variety of them through contacts with drug sellers and other users.

What are the laws dealing with marihuana?

Under federal law, which classifies marihuana as a narcotic, to have, give, or sell marihuana in the United States is a felony. Federal laws and many state laws deal with the drug as severely as if it were a narcotic.

The federal penalty for possessing the drug is 2 to 10 years imprisonment for the first offense, 5 to 20 years for the second offense, and 10 to 40 years for further offenses. Fines of up to $20,000 for the first or subsequent offenses may be imposed.

State laws also control the illicit use of these drugs. For transfer or sale of the drug, the first offense may bring a 5- to 20-year sentence and a fine of up to $20,000; two or more offenses, 10 to 40 years in prison. If a person over 18 sells to a minor under

18 years of age, he is subject to a fine of up to $20,000 and/or 10 to 40 years in prison for the first offense, with no suspension of sentence and no probation or parole.

What are the special risks for young users?

Breaking the laws that deal with marihuana can have serious effects on the lives of young people. They may find their education interrupted and their future shadowed or altered by having a police record. A conviction for a felony can complicate their lives and plans at many turns. It can prevent a person from being able to enter a profession, such as medicine, law, or teaching. It can make it difficult for him to get a responsible position in business or industry. Special individual evaluation is necessary to obtain a government job. Before a student tries marihuana, he should know these facts.

Experts on human growth and development point out other risks. They say that a more subtle result of drug abuse on the young person is its effect on his personality growth and development. For young people to experiment with drugs at a time when they are going through a period of many changes in their transition to adulthood is a seriously questionable practice.

"It can be especially disturbing to a young person who is already having enough of a task getting adjusted to life and establishing his values," says an NIMH scientist engaged in studies of young marihuana users.

Another reason for caution is the lack of scientific evidence to support statements being reported by students that the use of marihuana is "medically safe." It is hoped that research now under way may add to the little currently known about the effects of the use of marihuana.

Why is so little known about the drug?

Medical science does not yet know enough about the effects of marihuana use because its active ingredient—tetrahydrocannabinol—was not available in pure form until recently. In the summer of 1966, the chemical, first synthesized by an NIMH-supported scientist in Israel, was made available for research purposes. Now for the first time researchers can accurately measure the drug's effects and study its short- and long-term action on the body.

What research is being done?

The National Institute of Mental Health is responsible for supporting and conducting research to learn more about marihuana and to present this knowledge to the public.

The program of the NIMH Center for Studies of Narcotic and Drug Abuse includes surveys of how people get the drug, how widely students and others use it, and what physical and psychological effects different amounts and periods of use have upon people. With NIMH support, scientists are now studying the special drug qualities of marihuana and its physical effects.

The NIMH Addiction Research Center in Lexington, Kentucky, is developing studies to discover exactly how marihuana affects memory, perception (or awareness), mood, and physical movement. Other studies are planned to learn more about the drug's long-range effects on the body and mind.

AMPHETAMINES AND BARBITURATES, THE UP AND DOWN DRUGS

Amphetamines, which first became available for medical use in the 1930's, are stimulants to the central nervous system and are best known for their ability to combat fatigue and sleepiness. They are also sometimes used to curb appetite in medically supervised weight-reduction programs. The most commonly used stimulants are amphetamine (Benzedrine), dextroamphetamine (Dexedrine), and methamphetamine (Methedrine). Slang terms for these drugs include "pep pills," "bennies," and "speed."

How do these drugs affect mood?

When properly prescribed by a physician, moderate doses can check fatigue and produce feelings of alertness, self-confidence, and well-being. In some people, this is followed by a letdown feeling or depression hangover. Heavier doses cause jitteriness, irritability, unclear speech, and tension. People on very large doses of amphetamines appear withdrawn, with their emotions dulled. They seem unable to organize their thinking.

What are the physical effects?

Stimulant drugs increase the heart rate; raise the blood pressure; cause palpitations (throbbing heart and rapid breathing); dilate the pupils; and cause dry mouth, sweating, headache, diarrhea, and pallor. They also depress the appetite.

How do these stimulants work?

Scientists have found that in the body these drugs stimulate the release of norepinephrine (a substance stored in nerve endings) and concentrate it in the higher centers of the brain. This speeds up the action of the heart and the metabolic process through which the body converts food into the chemicals it needs.

What are the medical uses?

Amphetamines were first used to treat colds, because they shrink the nasal membranes and can give temporary relief for "stuffy" heads. More effective drugs with fewer side effects are now used for this purpose. Stimulants are now mainly prescribed for narcolepsy (overwhelming attacks of sleep), depression, and weight control. Use of these drugs as appetite depressants or for any other purposes is advisable only under the supervision of a physician, since stimulants can produce unwanted reactions. Doctors also prescribe these drugs for fliers, astronauts, and others who can use them as medically directed to ward off fatigue during dangerous and prolonged tasks.

Are stimulants misused?

About 20 percent of all medical prescriptions for mood-affecting drugs involve stimulants, according to a national survey. The drug industry produces enough each year to provide each American with 25 doses of these drugs. The Food and Drug Administration reports that about half of this supply enters illegal channels, for nonprescribed use. Black-market laboratories also produce stimulants, which are easily obtained from illegal sources.

All kinds of people abuse drugs—from the middle-aged businessman or housewife to students, athletes, and truck drivers. Recent government surveys show that young people are becoming the greatest abusers of these drugs. Drivers take them to stay awake on long trips, students take them while cramming for exams, and athletes take them, although sporting associations have banned their use. Some try them for a temporary kick. Some abusers reach a point where they need both stimulant and sedative drugs to get a chemical "up" and a chemical "down."

The stimulant drugs are generally swallowed as pills, but can be taken in liquid form by injection into a vein at regular time intervals. This is a dangerous practice known among abusers as "speeding."

Are these stimulants addicting?

Benzedrine, Dexedrine, and other stimulant drugs do not produce physical dependence as do the narcotics. Although the body does not become physically dependent on their continued use, it does develop a tolerance to these drugs so that larger and larger doses are required to feel the effects.

There is another kind of dependence medical authorities note in connection with the abuse of stimulants. They call it psychological dependence, meaning that a practice can become a habit for mental or emotional reasons, with the person getting used to and turning to the drug for its effects.

How dangerous are stimulant drugs?

These drugs can drive a person to do things beyond his physical endurance that leave him exhausted. Heavy doses may cause a temporary toxic psychosis (mental derangement) which requires hospitalization. This is usually accompanied by auditory and visual hallucinations. Abruptly withdrawing the drug from the heavy abuser can result in a deep and suicidal depression.

Long-term heavy users of the amphetamines are usually irritable and unstable and, like other heavy drug users, they show varying degrees of social, intellectual, and emotional breakdown.

Dangers from injecting "speed" (methamphetamine) into the vein include serum hepatitis, abscesses, and even death in the case of unaccustomed high doses. Injection of "speed" causes abnormal heart rates and may result in serious psychotic states and long-term personality disorders.

What are sedatives?

The sedatives belong to a large family of drugs manufactured for medical purposes to relax the central nervous system. Of these, the best known are the barbiturates, made from barbituric acid, which was first produced in 1846.

Barbiturates range from the short-acting, fast-starting, pentobarbital sodium (Nembutal) and secobarbital sodium (Seconal) to the long-acting, slow-starting phenobarbital (Luminal), amobarbital (Amytal), and butabarbital (Butisol). The short-acting preparations are the ones most commonly abused. The slang terms for these include "barbs" and "goof balls."

How widely are they used?

Recent surveys show that, of all the prescriptions doctors write for mood-affecting drugs, one in four is for a barbiturate.

Probably an equally large supply of these drugs is obtained illegally, without prescription.

What are their medical uses?

Doctors prescribe sedatives widely to treat high blood pressure, epilepsy, and insomnia; to diagnose and treat mental illness; and to relax patients before and during surgery. Alone or together with other drugs, they are prescribed for many types of illnesses and conditions.

What are their effects?

Taken in normal, medically supervised doses, barbiturates mildly depress the action of the nerves, skeletal muscles, and the heart muscle. They slow down the heart rate and breathing, and lower the blood pressure.

But in higher doses, the effects resemble drunkenness: confusion, slurred speech, and staggering. The ability to think, to concentrate, and to work is impaired, and emotional control is weakened. Users may become irritable, angry, and combative. Finally, they may fall into deep sleep.

Is barbiturate use dangerous?

Authorities consider the barbiturates highly dangerous when taken without medical advice and prescription. Because doctors commonly prescribe these drugs, many people mistakenly consider them safe to use freely and as they choose. They are not. Overdose can cause death.

Barbiturates distort how people see things and slow down their reactions and responses. They are an important cause of automobile accidents, especially when taken together with alcohol. Barbiturates tend to heighten the effects of alcohol.

Users may react to the drug more strongly at one time than at another. They may become confused about how many pills they have taken and die of an accidental overdose. Barbiturates are a leading cause of accidental poison deaths in the United States. They are also one of the main means people use to commit suicide.

Are barbiturates addicting?

Yes. These drugs are physically addicting. Some experts consider barbiturate addiction more difficult to cure than a narcotic dependency. The body needs increasingly higher doses to feel their effects. If the drug is withdrawn abruptly, the user suffers withdrawal sickness with cramps, nausea, delirium, and convulsions, and in some cases, sudden death. Therefore, withdrawal should take place in a hospital over a period of several weeks on gradually reduced dosages. It takes several months for the body to return to normal.

What are the legal controls?

The Bureau of Narcotics and Dangerous Drugs in the Department of Justice regulates stimulant and depressant drugs. Regulations provide for a strict accounting of all supplies of drugs by the manufacturer, distributor, and seller, and restrict the user to five refills of any one prescription. This means that these drugs can be had legally only through a doctor. Illicit manufacturing, distributing, dispensing, and possession of stimulants and depressants with intent to sell can bring a fine of up to $10,000 and a prison sentence of up to five years. Persons over 18 convicted of selling these drugs to persons under 21 can be fined $15,000 and receive 10 years in jail. Second and subsequent sales of these drugs to minors may yield a fine of $20,000 and 15 years in jail. Illegal possession without intent to sell can bring a fine of $1,000 and/or imprisonment for one year. State laws also control illicit use of these drugs.

What research is being done?

The National Institute of Mental Health is the federal agency primarily responsible for research on drug addiction and abuse. It is conducting extensive animal research to uncover the underlying action of the up-and-down drugs and to try to find out how psychological or physical dependence develops It is searching for new drugs and techniques to treat overuse and dependence on the amphetamines and the barbiturates. Some investigators are developing new tests to detect these drugs in the body.

In addition, the NIMH is supporting a number of surveys to determine the use of these drugs by various population groups. Research investigators are trying in particular to learn how young people become involved in drug abuse and what can be done to help prevent this.

WHAT IS LSD?

A powerful man-made chemical, D-lysergic acid diethylamide, generally called LSD, was first developed in 1938 from one of the ergot alkaloids. Ergot is a fungus that grows as a rust on rye and other cereals. LSD is so powerful that a single ounce is enough to provide 300,000 average doses.

Legally classified as a hallucinogen—a mind-affecting drug—LSD is noted mainly for producing strong and bizarre mental reactions in people, and striking distortions in their physical senses, in what and how they see, touch, smell, and hear. Except for government-approved use for research, the drug is illegal in the United States. Yet it is unlawfully produced in makeshift laboratories, and many people, including up to 7 percent of the students on some campuses, have taken it.

Other less known but powerful hallucinogens or psychedelic (mind-manifesting) drugs include peyote, mescaline, psilocybin, DMT, and STP.

Why do people take LSD?

Reasons given by users for taking LSD include: "curiosity," "for kicks," "to understand myself better," or a quest for religious or philosophical insights. At various times in history, substances as diverse as alcohol, ether, opium, and nitrous oxide (so-called laughing gas) have also been claimed capable of providing an easy and instant path to wisdom, or to religious or philosophical insights. Today these "consciousness expanders" of an earlier day are regarded as merely commonplace substances without any mystical properties whatever.

Recent surveys and hospital reports show that the drug's popularity may be dropping, at least in some areas of the country, as its potential ill effects become better known.

What are its physical effects?

An average dose of LSD, amounting to a speck, has an effect that usually lasts from about 8 to 10 hours. Users take it in capsule form or in a sugar cube, cracker, or cookie, or they can lick it off a stamp or other object impregnated with the drug. It increases the pulse and heart rate. It also causes a rise in blood pressure and temperature, dilated eye pupils, shaking of the hands and feet, cold sweaty palms, a flushed face or paleness, shivering, chills with goose pimples, irregular breathing, nausea, and loss of appetite.

The drug is not physically addicting in the way that narcotics are. That is, the body not develop a physical need for LSD or physical sickness when it is withdrawn.

What are its psychological effects?

People who use LSD say that it has a number of effects. The first effects, they indicate, are likely to be sudden changes in their physical senses. Walls may appear to move; colors seem stronger and more brilliant. Users are likely to "see" unusual patterns unfolding before them. Flat objects seem to stand out in three dimensions. Taste, smell, hearing, and touch seem more acute. One sensory impression may be translated or merged into another; for example, music may appear as a color, and colors may seem to have taste.

One of the most confusing yet common reactions among users is the feeling of two strong and opposite emotions at the same time—they can feel both happy and sad at once or relaxed and tense. Arms may feel both heavy and light at the same time.

Users also report a sensation of losing the normal feeling of boundaries between body and space. Sometimes they believe they can fly or float with ease.

Effects can be different at different times in the same individual. Researchers have found that even in carefully controlled studies responses to the drug cannot be predicted. For this reason, users refer to "good trips" or "bad trips" to describe their experiences.

Among LSD's other effects on the user is the loss of his sense of time. He doesn't know how much time is passing, but he does remain conscious.

Does the drug affect thinking?

Scientists report that the LSD user can reason logically, up to a point, while undergoing the drug's effects. He usually remembers after the drug wears off much of what happened to him. He may, for example, have become fascinated with an object in the room, like a chair or a vase. On larger doses, he may feel mystical and report a sense of rebirth or new insights. But he is often unable to explain his experience to others. Many medical authorities feel that chronic or continued use of LSD changes values and impairs the user's powers of concentration and ability to think. This may lead to a tendency to drop out of society.

Does LSD increase creativity?

Some users believe that LSD can heighten their senses, and help to make them more creative. But studies of paintings, writings, and other works produced by drug users have failed to support this viewpoint. In many cases, works performed by people after they used LSD appeared to be noticeably poorer than before.

How does the drug act?

Just how LSD works in the body is not yet known. But it seems to affect the levels of certain chemicals in the brain and to produce changes in the brain's electrical activity.

Animals experiments with LSD suggest that the brain's normal filtering and screening-out process becomes blocked, causing the brain to become flooded with unselected sights and sounds.

Studies of chronic LSD users indicate that they continue to suffer from an overload of stimulation to their senses. Researchers believe this may explain the regular user's inability to think clearly and to concentrate on a goal.

Is LSD dangerous?

Recent reports from hospitals in areas where LSD is used without close medical supervision warn of definite dangers. These dangers include:

1. Panic. Because he cannot stop the drug's action, the user may get panicky and fear that he is losing his mind.

2. Paranoia. He may become increasingly suspicious, felling that someone is trying to harm him or control his thinking. This feeling generally lasts 72 hours after the drug has worn off.

3. Recurrence. Days, weeks, or even months after the individual has stopped using LSD, the things he saw and felt while on the drug may recur and make him fear he is going insane.

4. Accidental death. Because the LSD user may feel that he can fly or float in the air, he may try to leap out of a high window or from other heights and fall to his death. Or he may drive or walk in front of a moving car because he thinks he can't be harmed.

Does LSD cause mental illness?

Reactions resulting from use of LSD range from great worry, panic, and deep depression to borderline and severe mental derangement. Medical experts point out that the overwhelming worries and fears that can accompany the LSD experience are sometimes disturbing enough to cause acute and even long-lasting mental illness.

Does LSD cause birth defects?

A number of investigators are studying the effects of LSD on chromosomes. These are the tiny threads of matter in the nucleus of every cell that carry genetic or hereditary information and guide reproduction. Several scientists have reported that the drug causes chromosomal damage or changes when it is added to a tissue culture of white blood cells. Others report that the chromosomes of individuals who presumably have taken LSD show unusual breaks. They warn that this may possibly cause abnormalities in the offspring of LSD users.

Some researchers have reported fetal damage when LSD was given to pregnant rats and mice, and others have described human birth defects in newborns whose mothers said they took LSD.

No conclusive or direct link has yet been found between LSD and chromosomal breaks, nor has it been found that such breaks cause birth defects. Some changes in the cells are temporary and not permanent. But the preliminary evidence is arousing the concern of scientists.

Until further research throws more light on the question, medical authorities warn that the drug must be considered a definite risk, and women of child-bearing age are particularly advised not to use the drug.

Are there special hazards for young users?

The strong sensations and clash of moods the drug causes can be frightening, even for a mature person. For young people who are still undergoing emotional development and who seek a realistic hold on ways of solving problems and ways of living, the effects of LSD can be even more frightening and confusing. The growing brain is more vulnerable than the adult brain to all mind-altering drugs.

Does LSD have medical uses?

The drug has been tested widely as a possible treatment for mental and emotional illnesses, and for alcoholism. In studies so far, it has failed to help the severely ill. But under controlled conditions, neurotics and alcoholics have made some improvement, according to investigators. The work is not complete, but follow-up studies indicate that these improvements are not always lasting.

The drug is a valuable tool in biomedical research, but its therapeutic value may be limited to special cases.

How does the law view LSD?

Because LSD is a dangerous drug when not used for research under medical supervision, it is closely regulated by the Bureau of Narcotics and Dangerous Drugs, Department of Justice. The law provides strict penalties for anyone who illegally produces, sells, possesses with intent to sell, or disposes of dangerous drugs like LSD. Conviction can bring a fine of $10,000 and/or imprisonment for up to five years. For persons over 18 years of age who sell or give drugs to anyone under 21, the law provides a penalty of up to 10 years in jail and a fine of up to $15,000. Second and subsequent such offenses may be penalized by up to 15 years imprisonment and/or a $20,000 fine. Merely possessing this drug illegally without intention of selling it can bring a fine of $1,000 and/or one year in prison. Some state laws are even more severe.

What are NIMH activities in LSD?

The National Institute of Mental Health is the primary federal agency responsible for supporting and overseeing research on LSD. It possesses the only legal supply of the drug in the United States. The NIMH Center for Studies of Narcotic and Drug Abuse is currently supporting 58 research projects which include surveys of the extent of the use of LSD by students and by the general population; LSD's biological, psychological, and genetic effects in animals and in humans; basic studies to explain the drug's action and to chart its course through the body; and long-range projects to study LSD users and their culture.

Investigators are about to complete a series of studies to determine the value of the drug as a treatment for alcoholism and emotional problems, and as a way to provide some mental relief for persons with terminal illness. They are also searching for new ways to treat people who suffer from the drug's bad side effects.

Research in this area is expected to grow until science has found more answers to the many questions LSD has raised.

Chart Listing Drugs, Medical Uses, Symptoms

(Question marks indicate

Name	Slang name	Chemical or trade name	Source	Classification	Medical use	How taken
Heroin	H., Horse, Scat, Junk, Smack, Scag, Stuff, Harry	Diacetylmorphine	Semi-Synthetic (from Morphine)	Narcotic	Pain relief	Injected or Sniffed
Morphine	White stuff, M.	Morphine sulphate	Natural (from Opium)	Narcotic	Pain relief	Swallowed or Injected
Codeine	Schoolboy	Methylmorphine	Natural (from Opium), Semi-Synthetic (from Morphine)	Narcotic	Ease Pain and coughing	Swallowed
Methadone	Dolly	Dolophine Amidone	Synthetic	Narcotic	Pain relief	Swallowed or Injected
Cocaine	Corrine, Gold Dust, Coke, Bernice, Flake, Star Dust, Snow	Methylester of benzoylecgonine	Natural (from coca, NOT cacao)	Stimulant, Local Anesthesia	Local Anesthesia	Sniffed, Injected or Swallowed
Marijuana	Pot, Grass, Hashish, Tea, Gage, Reefers	Cannabis sativa	Natural	Relaxant, Euphoriant, In high doses Hallucinogen	None in U.S.	Smoked, Swallowed, or Sniffed
Barbiturates	Barbs, Blue Devils, Candy, Yellow Jackets, Phennies, Peanuts, Blue Heavens	Phenobarbital Nembutal, Seconal, Amytal	Synthetic	Sedative-hypnotic	Sedation, Relieve high blood pressure, epilepsy, hyperthyroidism	Swallowed or Injected
Amphetamines	Bennies, Dexies, Speed, Wake-Ups, Lid Proppers, Hearts, Pep Pills	Benzedrine, Dexedrine, Desoxyn, Methamphetamine, Methedrine	Synthetic	Sympathomimetic	Relieve mild depression, control appetite and narcolepsy	Swallowed or Injected
LSD	Acid, Sugar, Big D, Cubes, Trips	d-lysergic acid diethylamide	Semi-Synthetic (from ergot alkaloids	Hallucinogen	Experimental study of mental function, alcoholism	Swallowed
DMT	AMT, Businessman's High	Dimethyltriptamine	Synthetic	Hallucinogen	None	Injected
Mescaline	Mesc.	3,4,5-trimethoxyphenethylamine	Natural (from Peyote)	Hallucinogen	None	Swallowed
Psilocybin		3 (2-dimethylamino) ethylindol-4-oldihydrogen phosphate	Natural (from Psilocybe)	Hallucinogen	None	Swallowed
Alcohol	Booze, Juice, etc.	Ethanol ethyl alcohol	Natural (from grapes, grains, etc. via fermentation)	Sedative hypnotic	Solvent, Antiseptic	Swallowed
Tobacco	Fag, Coffin nail, etc.	Nicotinia tabacum	Natural	Stimulant-sedative	Sedative, Emetic (nicotine)	Smoked, Sniffed, Chewed

Produced and their Dependence Potentials

conflict of opinion)

Usual Dose	Duration of effect	Effects sought	Long-term symptoms	Physical dependence potential	Mental dependence potential	Organic damage potential
Varies	4 hrs.	Euphoria, Prevent withdrawal discomfort	Addiction Constipation Loss of Appetite	Yes	Yes	No
15 Milligrams	6 hrs.	Euphoria, Prevent withdrawal discomfort	Addiction Constipation Loss of Appetite	Yes	Yes	No
30 Milligrams	4 hrs.	Euphoria, Prevent withdrawal discomfort	Addiction Constipation Loss of Appetite	Yes	Yes	No
10 Milligrams	4–6 hrs.	Prevent withdrawal discomfort	Addiction Constipation Loss of Appetite	Yes	Yes	No
Varies	Varies, Short	Excitation Talkativeness	Depression Convulsions	No	Yes	Yes?
1–2 Cigarettes	4 hrs.	Relaxation, increased euphoria, Perceptions, Sociability	Usually None	No	Yes?	No
50–100 Milligrams	4 hrs.	Anxiety reduction, Euphoria	Addiction w/ severe withdrawal symptoms, Possible convulsions, toxic psychosis	Yes	Yes	Yes
2.5–5 Milligrams	4 hrs.	Alertness Activeness	Loss of Appetite Delusions Hallucinations Toxic psychosis	No?	Yes	Yes?
100–500 Micrograms	10 hrs.	Insightful experiences, exhilaration, Distortion of senses	May intensify existing psychosis, panic reactions	No	No?	No?
1–3 Milligram	Less than 1 hr.	Insightful experiences, exhilaration, Distortion of senses	?	No	No?	No?
350 Micrograms	12 hrs.	Insightful experiences, exhilaration, Distortion of senses	?	No	No?	No?
25 Milligrams	6–8 hrs.	Insightful experiences, exhilaration, Distortion of senses	?	No	No?	No?
Varies	1–4 hrs.	Sense alteration Anxiety reduction, Sociability	Cirrhosis Toxic psychosis Neurologic damage, Addiction	Yes	Yes	Yes
Varies	Varies	Calmness Sociability	Emphysema, Lung cancer, mouth & throat cancer, cardiovascular damage, loss of appetite	Yes?	Yes	Yes

WHAT ARE NARCOTIC DRUGS?

The term narcotic refers, generally, to opium and pain-killing drugs made from opium, such as heroin, morphine, paregoric, and codeine. These and other opiates are obtained from the juice of the poppy fruit. Several synthetic drugs, such as Demerol and Dolophine, are also classed as narcotics. Opiates are widely used in medicine as pain killers. Cocaine, made from coca leaves, and marihuana, are classified legally but not chemically as narcotic drugs.

Since heroin appears to be the narcotic used by most addicts today, the following questions and answers deal mainly with heroin.

What is narcotic addiction?

When the abuser of a narcotic gets "hooked"—meaning addicted—his body requires repeated and larger doses of the drug. Once the habit starts, larger and larger doses are required to get the same effects. This happens because the body develops a tolerance for the drug.

One of the signs of heroin addiction is withdrawal sickness. When the addict stops using the drug, he may sweat, shake, get chills, diarrhea, nausea, and suffer sharp abdominal and leg cramps. Modern treatments help the addict through these withdrawal stages. Science now has new evidence that the body's physical addiction may last much longer than previously believed.

There is another kind of drug dependence connected with the use of narcotics. This is known as psychological dependence. That is, taking the drug also becomes a habit for emotional reasons. For example, the addict comes to depend on the drug as a way to escape facing life.

Narcotic use can become even more of an escape than expected, because large or unexpectedly pure doses can—and not uncommonly do—result in death.

What is the effect of heroin?

Typically, the first emotional reaction to heroin is reduction of tension, easing of fears, and relief from worry. Feeling "high" may be followed by a period of inactivity bordering on stupor.

Heroin, which is usually mixed into a liquid solution and injected into a vein, appears to dull the edges of reality. Addicts have reported that heroin "makes my troubles roll off my mind," and "makes me feel more sure of myself."

The drug depresses certain areas of the brain, and may reduce hunger, thirst, and the sex drive. Because addicts do not usually feel hungry, their hospital care may include treatment for malnutrition. The drug may also reduce feelings of pain.

Withdrawal symptoms appear in the addicted person about 18 hours after the drug has been discontinued.

In general, many factors influence the effects of the drug. These include the user's personality, the size and frequency of dose, and how the drug is taken.

Who takes narcotics?

Studies by the U.S. Public Health Service show that heroin addiction today is found chiefly among young men of minority groups in ghetto areas. Of the more than 60,000 known addicts listed by the Bureau of Narcotics and Dangerous Drugs, more than half live in New York State—and most of these in New York City. Recent figures show that more than half of the addicts are under 30 years of age.

Narcotic addiction in the United States is not limited to the heroin users. Some middle-aged and older people who take narcotic drugs regularly to relieve pain can also become addicted. So do some people who can get drugs easily, such as doctors, nurses, and druggists. Studies show that this type of addict has personality and emotional difficulties not much different from other regular narcotic users.

What is the life of an addict like?

Many addicts admit that, once on drugs, getting a continued supply becomes the main object of their lives. Concentration on getting drugs frequently prevents the addict from continuing either his education or his job. His health is often bad. He may be sick one day from the effects of withdrawal and sick the next from an overdose. Statistics indicate the life span of the drug-dependent individual may be drastically shortened. He is usually in trouble with his family and almost always in trouble with the law.

Does addiction lead to crime?

Some stuides suggest that many of the known narcotic addicts have had some trouble with the law before they became addicted. Once addicted, they may become even more involved with crime because it costs so much to support the heroin habit. For example, an addict may have to spend as much as $75 or $100 to buy his day's supply of heroin.

Most authorities agree that the addict's involvement with crime is not a direct effect of the drug itself, but turning to crime is usually the only way he has of getting that much money. His crimes are nearly always thefts or other crimes against property, and not ofen crimes of passion or violence.

What are the legal penalties?

The Harrison Act of 1914, which provides that illegal possession of narcotics is punishable by fines and/or imprisonment, established federal penalties for illegal narcotics usage. Sentences can range from 2 to 10 years for the first offense, 5 to 20 years for the second, and 10 to 20 years for further offenses.

Illegal sale of narcotics can mean a fine of $20,000 and a sentence of 5 to 20 years for the first offense, and 10 to 40 years for further offenses. A person who sells narcotics to someone under 18 is refused parole and probation, even for the first offense. If the drug is heroin, he can be sentenced to life imprisonment or to death.

The Harrison Act has served as a model for most state laws, and both federal and state judges have generally imposed severe sentences for narcotics violations.

What is the medical view of addiction?

Medical authorities say that the addict is a sick person. He needs treatment for his physical addiction and withdrawal sickness. Then, he needs help to keep from going back to drug use after his withdrawal.

The most difficult part of an addict's treatment comes after he is out of the hospital. The doctors can help get him off the drug and help to restore his health, but it is harder to keep him from picking up the habit again, for many reasons. Drug taking may have become his way of life, including the friends he has and the kind of job he can get. He may not have a healthy enough personality to want to make a fresh start in life or to enjoy normal pleasures.

A number of rehabilitation approaches to the problems are being tested. Rehabilitation means physical, mental, emotional, social, and vocational rebuilding. With many addicts, it can take all of these efforts combined to keep their lives from being wasted.

One experimental technique to help addicts involves maintenance treatment in community clinics, where the addict can go regularly to take a drug that effectively blocks the "high" he would feel from his heroin. Addicts who have stayed off the drug for a number of years report that close supervision and continued treatment once they returned home from the hospital were the main factors in their rehabilitation.

In a New York City halfway house, a self-help program run by former addicts is being tried as a way to help people break the drug habit. One of the features of Day-top Village is the "no nonsense" treatment the new patients get from the senior members of the house. They hold frank and open group discussions several times a week, and gain status and privileges only by hard work, honesty, and staying off drugs. The treatment program lasts a year.

Because the rebuilding of a life can require many services and special programs, this chance for addicts was very limited in the past. Now a new law—the Narcotic Addict Rehabilitation Act of 1966—gives certain addicts a choice of treatment instead of imprisonment, and if they are not charged with a crime, the right to receive treatment instead of neglect. The law also provides for the first time that a complete range of rehabilitation services will be made available to addicts in their own home communities.

What is the Narcotic Addict Rehabilitation Act of 1966?

The Act provides that:

1. An addict charged with a nonviolent federal offense who elects to be committed for treatment instead of prosecuted for his crime can be committed to the Secretary, Department of Health, Education and Welfare, for examination, treatment, and rehabilitation.
2. An addict already convicted of a crime can be committed to the Attorney General for a treatment period of no more than 10 years, or for the maximum period of sentence that could be imposed for his conviction.
3. An addict not charged with an offense can be civilly committed to the Secretary for treatment upon his own application, or that of a relative or another "related individual."

Care of the addict after his release from the hospital is a key aspect of his treatment.

The National Institute of Mental Health of the U. S. Department of Health, Education, and Welfare and the Department of Justice administer the Act.

Under more recent legislation, states and communities can receive federal support through the NIMH for specialized training programs, and for the construction, staffing, and operation of new addiction treatment facilities on a joint federal-state basis.

What is being done to learn more about addiction?

The National Institute of Mental Health operates Clinical Research Centers at Lexington, Kentucky, and Fort Worth, Texas. Scientists at the centers do research on patterns of drug usage, on effects of drug use, and on antidotes for narcotic addiction. These centers were formerly Public Health Service hospitals for addicts and will treat addicts under the new Act until community hospital facilities are available.

At the Lexington center, Institute scientists are working with comparatively new drugs, cyclazocine and naloxone. Early clinical trials suggest that regular doses of these drugs can help prevent heroin relapse by decreasing the addict's desire for heroin.

In addition, the NIMH Center for Studies of Narcotic and Drug Abuse supports research, training, and services dealing with problems of addiction.

DEPENDENCE ON BARBITURATES AND OTHER SEDATIVE DRUGS

In today's society, anxiety, tension states, insomnia, and other manifestations of stress are common. Many persons seek relief by self-medication with alcohol, and over-the-counter and prescription sedatives. Unfortunately, social acceptance of this kind of self-medication seems to be increasing.

Historical Note

Drug abuse is probably as old as the earliest civilizations. Man has used great ingenuity in identifying substances which ease tensions, but for centuries available agents remained relatively static, limited to botanicals and their derivatives. Then, in the 1850's, modern chemistry opened a new chapter with the introduction of bromides as sedatives. With use, however, came misuse and abuse which often resulted in intoxication and psychotic or delirious complications. The bromide problem began to abate in the 1930's but only because the compounds were replaced by other sedatives, primarily the barbiturates.

The first barbiturate, Veronal, was introduced in 1903, and a large number of others followed in quick succession. The short-acting barbiturates, especially pentobarbital, secobarbital, and amobarbital, came into widespread use within the last 20 to 30 years. Like the bromides, they have been subject to abuse. In the United States, these drugs can be purchased on the black market and are being used either alone or in combinations, particularly with heroin, amphetamines, or alcohol.

The dependence-producing qualities of the barbiturates were not immediately recognized, but they have become increasingly clear since 1940. It should be noted, however, that the long-acting barbiturates, such as phenobarbital, are less apt to be abused than the short-acting barbiturates.

In the 1950's, a new class of drugs, the so-called minor tranquilizers, began to appear. They have a barbiturate-like action and can produce both psychological and physical dependence. They quickly found widespread use, found their way to the black market, and have been abused in much the same manner as the barbiturates. (See the Appendix for a list of barbiturates and other sedatives and hypnotics.)

Definition of the Problem

Barbiturate Production in the U. S.

A survey by the Food and Drug Administration indicates that in 1962 approximately one million pounds of barbituric acid derivates were available in the United States. This one-year inventory is enough to supply approximately twenty-four 100-mg (1½-grain) doses to every man, woman, and child in the country. An estimated 50% of these drugs were the short- and intermediate-acting barbiturates which are particularly subject to abuse. Since it is considered probable that the available

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supply mirrors demand, current production of all sedative drugs doubtless exceeds legitimate medical need by a considerable margin.

Use of Sedatives

By Physicians: Each of the barbiturates and other drugs with a barbiturate-like action listed in the Appendix has specific clinical indications in the practice of medicine. Many medical problems, in everyday practice, are efficaciously met by the proper and judicious use of these drugs.

The psysician relies heavily on the barbiturates for the treatment of insomnia. These compounds are convenient and reasonably effective, despite certain adverse reactions such as "hang-over," development of tolerance, occasional rashes, and paradoxical excitation.

By Patients: Although barbiturates and similar compounds require physician prescription, a number of substances with unpredictable sedative or hypnotic action are available over the counter. Among these are the antihistamines, antiemetics, scopolamine, and bromides.

Abuse of Sedatives

"Abuse" is used to describe self-administration of excessive quantities of barbiturates leading to tolerance, physical and psychological dependence, mental confusion, and other symptoms of abnormal behavior. The groundwork for drug abuse may often be established by therapeutic misuse by the physician; however, many persons will seek drug supplies from sources other than the physician. Excessive use is likely to result in the user becoming wholly dependent on barbiturates to the exclusion of other values in life. Many dependent persons seek to avoid reality. gain relief from tensions and anxieties. They take these drugs in lieu of or in addition to alcohol or opiates. Others follow the same procedure in search of paradoxical excitation and new thrills.

Psychiatric Considerations

Generally any patient whose psychological dependence on a barbiturate drug has reached a degree sufficient to constitute drug abuse has some form of underlying psychopathology. The excessive use of barbiturates usually induces additional psychopathologic changes. The barbiturate-dependent person, in these cases, is directly comparable to the opiate-dependent person.

The underlying reasons why an individual takes barbiturates vary from person to person and may even serve different purposes at different times for the same patient. It should be noted that there are some groups in society, subject to special tension situations, for whom certain forms of "escape" are socially acceptable. In these groups, barbiturate abuse may be found particularly in adolescents and younger adults. In all cases, however, the drug-dependent person has found something that he knows will give him "relief" from tensions and anxieties which to him are unbearable.

Barbiturate dependence has one characteristic in common with all other states of drug dependence. It is almost always a chronic relapsing disorder, and cycles of withdrawal and reversion to drug use are likely to occur in most cases. In all cases, continuing treatment of the dependency state and any underlying emotional disorder is essential, even though there is intermittent, periodic, or even continuing drug use.

Patterns of Abuse

Types of Abusers

Essentially there are four types of barbiturate-drug abuse, and they overlap only occasionally.

1. In the first group are persons seeking the sedative (hypnotic) effects of the drug in order to deal with states of emotional distress.
2. In the second group there is a paradoxical reaction of excitation that occurs after tolerance has developed because of prolonged use. The drug now stimulates rather than depresses and is taken to exhilarate and animate the person to so-called increased efficiency.
3. In a third group are persons who take barbiturates to counteract abuse effects of various stimulant drugs, such as the amphetamines. They set up a mutually reciprocating, cyclical pattern of stimulation-sedation.
4. In the fourth category, barbiturate abuse is found in combination with other types of drug abuse, mainly alcohol and/or opiates. Many alcoholics attempt to counteract the withdrawal effects of alcohol with barbiturates. Frequently, alcohol and barbiturates are combined in an attempt to obtain effects that surpass those of either.

Diagnosis of Misuse and Abuse

General

The physician should suspect dependence on sedatives if members of the family report that the patient is sedated, confused, ataxic, incoordinate, and irritable.

Early diagnosis of barbiturate abuse and/or dependence is often difficult. In many cases, drug dependence or intoxication is diagnosed only after hospitalization of the patient for some other clinical condition. Often the first objective finding of barbiturate dependence is the onset of acute withdrawal, perhaps a single, unexplained grand mal seizure brought on by sudden abstinence.

Intoxication

Intoxication with barbiturates resembles intoxication with alcohol. Symptoms and signs include various degrees of clouding of consciousness with impairment of mental functioning, confusion and poor judgment, euphoria or depression, loss of emotional control, irritability, abnormal behavior, and occasionally convulsions or signs of a toxic psychosis.

Withdrawal Syndrome

Sudden and abrupt withdrawal of barbiturates from a person who is physically dependent results in definite abstinence signs and symptoms. Their intensity varies according to the dose taken, the length of time the patient has been physically dependent, the degree of intoxication produced by doses consumed, and individual factors which remain incompletely understood.

Even though no treatment is given, the entire withdrawal syndrome is usually a self-limited condition. Clinical recovery appears to be complete and no organic sequelae are known to occur. However, patients have died during uncontrolled, untreated barbiturate-withdrawal syndromes.

Appendix

Hypnotic and sedative drugs comprise a large group of chemically unrelated substances which have the common property of inducing sedation and sleep with small quantities and anesthesia with large quantities. Barbital and its congeners represent the largest single group of these compounds. The following drugs are on the U.S. market:

Barbiturates

Barbital (Veronal)
Mephobarbital (Mebaral)
Metharbital (Gemonil)
Phenobarbital (Luminal)
Amobarbital (Amytal)
Aprobarbital (Alurate)
Butabarbital (Butisol)
Diallylbarbituric acid (Dial)
Probarbital (Ipral)
Talbutal (Lotusate)
Vinbarbital (Devinal)
Cyclobarbital (Phanodorn)
Heptabarbital (Medomin)
Hexethal (Ortal)
Pentobarbital (Nembutal)
Secobarbital (Seconal)
Hexobarbital (Cyclonal, Evipal, Sombulex)
Methitural (Nevaval)
Methohexital (Brevital)
Thiamylal (Surital)
Thiopental (Pentothal)
Allylbarbituric acid (Sandoptal)
Butethal (Neonal)
Cyclopentenyl allylbarbituric acid (Cyclopal, Cyclopen)
Butallylonal (Pernocton)

Drugs With Barbiturate-Like Action

Chlormezanone (Trancopal)
Emylcamate (Striatran)
Meprobamate (Equanil, Miltown)
Oxanamide (Quiactin)
Phenaglycodol (Ultran)
Mebutamate (Capla)
Carisoprodol (Soma)
Hydroxyzine (Atarax, Vistaril)
Ectylurea (Levanil, Nostyn)
Ethchlorvynol (Placidyl)
Methyprylon (Noludar)
Ethinamate (Valmid)
Chlordiazepoxide (Librium)
Hydroxyphenamate (Listica)
Mephenoxalone (Trepidone)
Carbromal (Adalin)
Bromisovalum (Bromural)
Chloral Betaine (Beta-Chlor)
Glutethimide (Doriden)
Chloral Hydrate (Somnos, Noctec, Loryl)
Diazepam (Valium)
Methylparafynol (Dormison)
Petrichloral (Periclor)
Buclizine (Softran)

DEPENDENCE ON AMPHETAMINES AND OTHER STIMULANT DRUGS

Stimulant drugs of the amphetamine type have been used in medical practice for the past 35 years. During this period identifiable patterns of abuse and misuse have been established, and it has been demonstrated that, for many persons, these substances have dependence-producing characteristics which can bring about serious clinical and personal problems. However, unlike that with narcotics or barbiturates, over-medication with stimulants does not lead to physical dependence. Abuse of these substances arises from and is perpetuated solely by psychic needs to overcome depression or fatigue or to attain the euphoric and excitatory effects associated with the drugs.

The routes to dependence on stimulant drugs are varied. Some start in the physician's office where a prescription for amphetamine is given as treatment for depression or as an adjunct to weight reduction. Most cases, however, stem from illicit channels where drugs are sold indiscriminately to a variety of customers, such as truck drivers who want to stay awake during long hauls or teenagers and young adults looking for "kicks."

The actual incidence and prevalence of cases of drug dependence of the amphetamine type are unknown. Clinical experience in the United States and other countries indicates an increase in amphetamine abuse, i.e. unsupervised self-administration. It also has become increasingly clear that many physicians have not fully appreciated the inherent dangers in prescribing these medications, and that in many cases their presumably therapeutic actions can constitute misuse of the drugs.

The degree to which the abuse of stimulant drugs stems from over-prescribing or from black market sales is not known. However, the problem is serious enough to warrant concern and an examination of the use, misuse, and abuse of the stimulants.

Historical Note

The main stimulant drugs are amphetamine and methamphetamine. Both were synthesized in the 1920's. The amphetamines, however, have a much greater capacity for stimulation of the central nervous system. With small doses of amphetamines, this stimulation is limited to elevation of mood and the induction of a state of 'well-being.' As the dosage is increased, apprehension, volubility, tremor, and excitement occur.

It soon became apparent that the amphetamines were effective in retarding fatigue-induced deterioration in psychomotor performance and that, under medical supervision, they had some appropriate use for weight reduction of obese persons. During the past 15 years, a number of amphetamine-like substances have been marketed as anorexiants. These drugs also stimulate the central nervous system to varying degrees and therefore have a potential for psychic disturbance and dependence.

Amphetamine-type drugs were in widespread use

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before their dependence-producing properties were recognized. However, their ability to cause euphoria, dysphoria, and psychic stimulation did lead to the removal of amphetamine from over-the-counter nasal inhalers. Restricting the legal acquisition of stimulants to prescription medications did not, however, put an end to their misuse or abuse; today these drugs are part of a major medical and social problem.

In 1965, concern in the United States about the growing problems of drug dependence and abuse led to the passage of legislation, supported by the American Medical Association, that gives the Food and Drug Administration authority to control the manufacture and distribution of substances having a potential for abuse, i.e. stimulants, depressants, and hallucinogens. The Drug Abuse Control Amendments of 1965 require that detailed records be kept on the manufacture, shipment, and distribution (including pharmacy prescription records) of the drugs covered. This law should be useful in reducing the amount of these drugs diverted to illicit channels. Amphetamine-type drugs are also illegally synthesized for distribution on the black market, and this traffic will be difficult to control.

Definition of the Problem

A survey by the Food and Drug Administration indicated that, in 1962, over 100,000 lbs. of amphetamine and methamphetamine products were available in the United States. The amount in this one-year inventory is enough to supply 250 mg of these stimulants to every man, woman, and child in the country, i.e. 25 to 50 doses per person.

Use and Misuse of Stimulants

Amphetamine-type drugs, in the usual dosage range, make most individuals more alert, more wakeful (often to the point of insomnia), and less aware of fatigue, and may produce euphoria or dysphoria. The drugs have some proper medical use in a few situations where an individual 'must' continue to perform adequately for an abnormally long time. The physician should judge carefully what constitutes a 'must' situation.

Physicians are frequently requested to prescribe stimulants for a variety of nonmedical reasons. Controlled studies have shown that amphetamines can drive trained athletes to increased performance in individual events involving strength and endurance. However, it has also been shown that this practice can, by artificially pushing the athlete beyond his normal endurance level, be harmful or even fatal.

Abuse of Stimulants

None of the drugs considered here is legally available without prescription. Large quantities, however, are available on the black market and, for example, thousands of pounds have been confiscated in stops along the nation's major trucking routes. The drugs are also sold "on the street" in lower socio-economic neighborhoods and in "beatnik" or "bohemian" gathering places. The bulk of the illicit supplies apparently are diverted from legitimate channels and handled by fraudulent wholesalers and other "front" organizations. An unknown percentage is obtained from unethical druggists or through forged or altered prescriptions.

There has been an alarming increase in the number of "spree" amphetamine abusers, usually teenagers or young adults, who use the drugs in a social setting for "kicks" or as an "experience." Many of these persons combine stimulants with other drugs, including alcohol, and "experiment" with the effects obtained from the various combinations. Not infrequently, stimulants are taken intravenously by serious drug abusers. More often, they are taken orally in the form of amphetamine-barbiturate combinations.

Patterns of self-medication with amphetamine-type drugs are varied. Some persons start taking stimulants to counteract effects resulting from abuse of barbiturates or alcohol, thus developing a cyclical pattern of sedation-stimulation in which, to a degree, each type of abuse counter-balances the effects of the other. Other persons try to achieve both effects simultaneously. In these cases, the clinical problem is of a dual nature.

Other dependence-prone persons, who have been introduced to stimulants as an anorexiant or to combat fatigue or depression, become chronic abusers. They often obtain their stimulants by "shopping" from one physician to another. Some develop a relatively mild form of psychic dependence in which, although believing that the drugs are essential to maintain their daily routine, they do not increase the dosage much beyond usual therapeutic limits. The more prevalent pattern of abuse is the one in which the person self-administers the drug with increasing frequency and in increasing amounts to get the desired euphoric effects.

With all dangerous drugs, the principal hazards of self-medication is that the abuser often is incapable of accurately evaluating his performance and is likely to overmedicate—a practice that, in neurotic or dependence-prone persons, often leads to chronic abuse.

Psychiatric Considerations

As with types of drug dependence, abuse of the amphetamine-type drugs almost invariably reflects some underlying form of psychopathology. Amphetamine dependence is a medical syndrome: a symptom complex that usually reflects some form of psychological and behavioristic disorder that has preceded and predisposed the patient to drug abuse. The stimulant is commonly used as an "adjustive" mechanism to help the person "deal" with problems of living and emotional difficulties. Abuse constitutes a "reaching out" for something without which the patient feels relatively helpless, and there is a continuum between what constitutes ill-advised "self-medication" and full abuse.

The underlying reasons for drug abuse vary from person to person, and the drug may serve different purposes at different times for the same patient. Usually, the amphetamine-dependent patient is, consciously or unconsciously, seeking to attain one or more of the following effects: relief from fatigue, increased mental alertness, a heightened sense of well-being (euphoria), and relief from the emotional tone of depression.

Withdrawal

There is no evidence that persons develop physical dependence to stimulant drugs, and abrupt withdrawal will not produce seizures; nor is it life-threatening, even for large-dosage, chronic abusers or persons with amphetamine psychosis. Depending on the intensity of the abuse, all measurable traces of amphetamine should disappear from the body in from two to seven days.

Although there is no characteristic abstinence syndrome, the abrupt discontinuance of amphetamines is not without complications. Withdrawal can uncover an underlying depression or it may precipitate a depressive reaction, often with a suicidal potential. There also is some evidence that in certain persons amphetamine intoxication can precipitate a schizophrenic episode.

In many persons whose stimulant intake masks chronic fatigue, withdrawal is followed by a two- or three-day period of intense tiredness and sleepiness.

DRUG DEPENDENCE: ITS SIGNIFICANCE AND CHARACTERISTICS

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The Term 'Drug Dependence'

Much thought and discussion have been devoted to finding a term that will cover all kinds of drug abuse. The component in common appears to be dependence, whether psychic or physical or both. Hence, use of the term 'drug dependence' with a modifying phrase linking it to a particular type of drug is recommended for both of the terms drug addiction and drug habituation. This recommendation has been endorsed by the WHO Scientific Group on Evaluation of Dependence-Producing Drugs (1964).

Drug dependence is a state of psychic or physical dependence, or both, on a drug, arising in a person following administration of that drug on a periodic or continuous basis.

It must be emphasized that drug dependence is a general term that has been selected for its applicability to all types of drug abuse and thus carries no connotation of the degree of risk to public health or need for any or a particular type of drug control. The agents controlled by international treaties and by national narcotics laws continue to be those that are morphine-like, cocaine-like, or cannabis-like, the use of which may result, respectively, in drug dependence of morphine type, of cocaine type, or of cannabis type. Other types of drug dependence, such as those of the barbiturate and amphetamine types, continue to present problems, and their description under the general term of drug dependence, while it may help to delineate those problems, in no way suggests or affects the measures to be taken to solve them.

Some drugs induce physical dependence, which is an adaptive state that manifests itself by intense physical disturbances when the administration of the drug is suspended or when its action is affected by the administration of a specific antagonist. These disturbances, i.e., the withdrawal or abstinence syndromes, are made up of specific arrays of symptoms and signs of psychic and physical nature that are characteristic for each drug type. These conditions are relieved by re-administration of the same drug or of another drug of similar action.

Many of the drugs that induce dependence, especially those that create physical dependence, also induce tolerance. Both drug dependence and drug abuse may occur without the development of demonstrable tolerance.

Drugs that are capable of inducing dependence may also be associated with psychotoxic effects that are manifested by profound alterations in behavior.

Excerpted from World Health Organization Bulletin, 1965. 32, 721–733.

These effects may occur with a single large dose or during the course of continued administration, or they may be precipitated by withdrawal of the drug following continued administration. The pattern of abnormal behavior is, within limits, characteristic for each drug type, but wide variation occurs in individual responses depending, among other things, upon the preexisting mental state of the person involved.

The characteristics of drug dependence show significant differences from one generic type to another, a situation that makes it mandatory to establish clearly the pattern for each type of drug dependence.

Characteristics of Drug Dependence

Drug Dependence of Morphine Type

The outstanding and distinctive characteristic of dependence on morphine and morphine-like agents is that the major elements—psychic and physical dependence, as well as tolerance—can be initiated by the repeated administration of small doses and increase in intensity in direct relationship to an increase in dosage. This characteristic implies that dependence on drugs of this generic type may be created within the dosage range generally used for therapeutic purposes, and that its mechanism may be set in motion by the first dose administered.

The characteristics of dependence of the morphine type are:

(a) Strong psychic dependence, which manifests itself as an overpowering drive or compulsion to continue taking the drug and to obtain it by any means, for pleasure or to avoid discomfort.

(b) An early development of physical dependence which increases in intensity, paralleling increase in dosage. This requires a continuation of administration of the same drug, or an allied one, to maintain a semblance of homeostasis and to prevent the appearance of the symptoms and signs of withdrawal. Withdrawal of the drug or administration of a specific antagonist precipitates a definite, characteristic and self-limited abstinence syndrome.

(c) Development of tolerance that requires an increase in dosage to obtain the initial pharmacodynamic effects.

With drug dependence of the morphine type, harm to the individual is, in the main, indirect, arising from preoccupation with drug-taking; personal neglect, malnutrition and infection are frequent consequences. For society also, the resultant harm is chiefly related to the preoccupation of the individual with drug-taking; disruption of interpersonal relationships, economic loss, and crimes against property are frequent consequences. The abstinence syndrome appears a few hours after the last dose, peaks in 24–48 hours. Most severe symptoms usually disappear within ten days.

Drug Dependence of Barbiturate-Alcohol Type

The signs and symptoms of barbiturate and of alcohol intoxication are similar, as are the signs and symptoms of abstinence from these drugs. Barbiturates will suppress alcohol abstinence phenomena, and alcohol will suppress, at least partially, the symptoms of barbiturate withdrawal. The two drugs are essentially addictive and interchangeable in chronic intoxications; these similarities justify the term "dependence of barbiturate-alcohol type," but there are psychological and sociological differences, so that barbiturate and alcohol dependence will be described separately.

Drug dependence of barbiturate type

While dependence on drugs of the barbiturate type presents certain similarities to dependence on drugs of the morphine type, in detail there is a characteristically different picture both during the course of intoxication and during withdrawal. It is a state arising from repeated administration of a barbiturate on a continuous basis, generally in amounts that exceed the usual therapeutic dose levels. There is a strong desire or need to continue taking the drug, a need that can be satisfied by the drug taken initially or by another with barbiturate-like properties. There is a psychic dependence on the effects of the drug that is related to subjective and individual appreciation of those effects, and there is physical dependence requiring the presence of the drug for the maintenance of homeostasis and resulting in a characteristic and self-limited abstinence syndrome when the drug is withdrawn.

Tolerance to barbiturates does develop and, with relatively low doses, it will become evident within seven days. There is, in contrast with tolerance to morphine-like drugs, a limit to the dose to which a person can become tolerant. This limit is a characteristic of the individual patient and varies widely.

During the chronic intoxication of continuing administration, there is some persistence of sedative action, ataxia, etc. through the incomplete development of tolerance, which makes the individual accident-prone. There is also impairment of mental ability, confusion, increased emotional instability, and risk of sudden overdosage.

The abstinence syndrome is the most characteristic and distinguishing feature of drug dependence of the barbiturate type. It begins to appear within the first 24 hours of cessation of drug-taking, reaches peak intensity in two or three days, and subsides slowly. Symptoms constituting the abstinence syndrome, in approximate order of appearance include: anxiety, involuntary twitching of muscles, tremor of hands and fingers, progressive weakness, dizziness, distortion in visual preception, nausea, vomiting, insomnia, weight loss, a precipitous drop in blood pressure on standing, convulsions of a grand-mal type, and delirium resembling alcoholic delirium tremens or a major psychotic episode.

In drug dependence of the barbiturate type, the detrimental effect on the individual stems in part from his preoccupation with drug-taking, but more particularly from the untoward effects of large doses of the drug. By analogy, all agents which produce barbiturate-like sedation, because of the relief of anxiety, mental stress, etc., should produce some psychic dependence and, for the reasons enumerated for dosage increase, physical dependence when a sufficient concentration in the organism has been attained.

Drug dependence of alcohol type

Drug dependence of the alcohol type may be said to exist when the consumption of alcohol by an individual exceeds the limits that are accepted by his culture, if he consumes alcohol at times that are deemed inappropriate within that culture, or if his intake of alcohol becomes so great as to injure his health or impair his social relationships. Since the use of alcoholic beverages is a normal, or almost normal, part of the cultures of many countries, dependence on alcohol is usually apparent as an exaggeration of culturally accepted drinking patterns, and the manifestations of dependence vary accordingly in a characteristic fashion with the cultural mode of alcohol use.

As with other drugs, psychic dependence on alcohol results from an interplay between the pharmacodynamic effects of the drug and the personality problems of the user. Other reasons not consciously verbalized, may include needs to express masculinity, to remove behavioral controls so that aggressive impulses may be expressed, and to blot out completely a hostile, threatening world.

Tolerance to alcohol does develop. During continuous drinking there is a slight but definite increase in the amount of ingested alcohol required to maintain a given blood level. In addition, some sort of physiological and psychological adaptation occurs so that the alcoholic appears less intoxicated and is less impaired in performance tests at a given concentration of blood alcohol than is a nonalcoholic. Tolerance to alcohol, however, is incomplete and never reaches the degree seen with morphine-like agents.

Physical dependence on alcohol definitely occurs, and the abstinence syndrome resulting when the intake of alcohol is reduced below a critical level is manifested by tremors, sweating, nausea, tachycardia, rise in temperature, hyper-reflexia, postural hypotension and, in severe grades, convulsions and delirium. The last-mentioned condition is characterized by confusion, disorientation, delusions and vivid visual hallucinations. The intensity of the alcohol abstinence syndrome probably varies with the duration and amount of alcohol intake.

Drug Dependence of Cocaine Type

Cocaine is the prototype of the stimulant drugs that are capable, in high dosage, of inducing euphoric excitement and hallucinatory experiences. These properties rank it high in the esteem of experienced drug abusers and lead to the highest degree of psychic dependence.

Abuse of cocaine takes several forms. The most common is the centuries-old custom of coca-leaf chewing, which is practised habitually by certain Indians of the high Andes. With this form of abuse, release of the alkaloid and its absorption generally are too slow or quantitatively too small to induce mental changes that would lead to abnormal behavior, as described below.

Diminished need for cocaine as a local anaesthetic and control of the world supply has reduced the total illicit use of this drug, but coincidentally there has developed a most dangerous type of abuse—intravenous injection. In the most advanced form, this type of abuse involves administration at frequent intervals, as short as 10 minutes, the user desiring the ecstatic thrills associated with this practice. This type of abuse appeals particularly to persons with psychopathic tendencies, which are often unmasked by the drug. The induced feeling of great muscular and mental strength leads the individual to overestimate his capabilities. This, associated with paranoid delusions and auditory, visual and tactile hallucinations, often makes the user a very dangerous individual, capable of serious antisocial acts. Digestive disorders, nausea, loss of appetite, emaciation, sleeplessness, and occasional convulsions are commonly experienced by cocaine abusers of this type. Long-standing, continuing misuse of cocaine alone at a high level is rare, however. The user reaches such a state of excitement that he voluntarily seeks sedation. A frequent current practice is to antagonize the exciting effects by the alternate administration of morphine or some other depressant drug, or by the injection of two types of drug in combination, the cocaine-heroin mixture ('speedball') being particularly popular.

No physical dependence on cocaine develops and, consequently, no characteristic abstinence syndrome is noted on abrupt withdrawal. But severe depression may occur and delusions may persist for some time after withdrawal.

Since cocaine undergoes rapid destruction in the organism, large quantities can be given during a 24-hour period. Indeed, in man as much as 10 gm daily may be used when the drug is administered in relatively small doses at short intervals.

In summary, then, the characteristics of drug dependence of the cocaine type are:

(a) Strong psychic dependence.
(b) No development of physical dependence and, therefore, absence of a characteristic abstinence syndrome when the drug is withdrawn.
(c) Absence of tolerance; rather, there is sensitization to the drug's effects in some instances.
(d) A strong tendency to continuation of administration, as in coca-leaf chewing, or rapid repetition of the dose, as in the current practice of intravenous administration. Quantitatively, the effects are strikingly different, according to the mode of abuse.

Cocaine is probably the best example of a substance to which neither tolerance nor physical dependence develops and with which psychic dependence can lead to a profound and dangerous type of drug abuse.

Drug Dependence of Cannabis (Marihuana) Type

It is not known with absolute certainty which of the chemical structures that have been isolated from Cannabis sativa L. is responsible for the typical cannabis effects, but these can nevertheless be described as constituting an entity that varies in degree according to the concentration of the active principle or principles in the plant and the preparations obtained therefrom, and to the mode of application. These effects are also producible by certain synthetic substances of similar chemical structure.

Among the more prominent subjective effects of cannabis, for which it is taken occasionally, periodically or chronically, are: hilarity, often without apparent motivation; carelessness; loquacious euphoria, with increased sociability as a result: distortion of sensation and perception, especially of space and time, with the latter reinforcing psychic dependence and being valued under special circumstances; impairment of judgment and memory; distortion of emotional responsiveness; irritability; and confusion. Other effects, which appear especially after repeated administration and as more experience is acquired by the user include: lowering of the sensory threshold, especially for optical and acoustical stimuli, thereby resulting in an intensified feeling for works of art, paintings and music; hallucinations, illusions, and delusions that predispose to antisocial behavior; anxiety and aggressiveness as a possible result of the various intellectual and sensory derangements; and sleep disturbances.

Typically, the abuse of cannabis is periodic but, even during long and continuous administration, no evidence of the development of physical dependence can be detected. There is, in consequence no characteristic abstinence syndrome when use of the drug is discontinued.

Whether administration of the drug is periodic or continuous, tolerance to its subjective and psychomotor effects has not been demonstrated.

Whereas cannabis often attracts the mentally unstable and may precipitate temporary psychoses in predisposed individuals, no unequivocal evidence is available that lasting mental changes are produced.

Drug dependence of the cannabis type is a state arising from chronic or periodic administration of cannabis or cannabis substances (natural or synthetic). Its characteristics are:

(a) Moderate to strong psychic dependence on account of the desired subjective effects.
(b) Absence of physical dependence, so that there is no characteristic abstinence syndrome when the drug is discontinued.
(c) Little tendency to increase the dose and no evidence of tolerance.

For the individual, harm resulting from abuse of cannabis may include inertia, lethargy, self-neglect, feeling of increased capability, with corresponding failure, and precipitation of psychotic episodes. Abuse of cannabis facilitates the association with social groups and sub-cultures involved with more dangerous drugs, such as opiates or barbiturates. Transition to the use of such drugs would be a consequence of this association rather than an inherent effect of cannabis. The harm to society derived from abuse of cannabis rests in the economic consequences of the impairment of the individual's social functions and his enhanced proneness to asocial and antisocial behavior.

Drug Dependence of Amphetamine Type

The capacity of the amphetamines and drugs with similar pharmacological properties to elevate mood and induce a state of well-being is probably largely the basis for their value and widespread use as stimulants and anorexiants. Since such therapy commonly involves continuous and prolonged administration, the users of these drugs may develop varying degrees of psychic dependence upon them. This fact establishes the basis for abuse, where the dosage may be increased in both quantity and frequency of administration in order to attain a continuing stimulation and state of elation. When carried to an extreme, the psychotoxic effects of large amounts of drugs of the amphetamine type may lead to aggressive and dangerous antisocial behavior.

The abuse of this class of drugs originates in and is perpetuated by the psychic drive to attain maximum euphoria; no physical dependence is created. Qualitatively, the psychological effects are in many respects similar to those produced by cocaine.

A unique feature of the amphetamines is their capacity to induce tolerance, a quality possessed by few central nervous system stimulants. Although tolerance develops slowly, a progressive increase in dosage permits the eventual ingestion of amounts that are several hundredfold greater than the original therapeutic dose. Apparently, all parts of the central nervous system do not become tolerant at the same rate, so that the user will continue to experience increased nervousness and insomnia as the dose is increased. Although an individual may survive the oral administration of very large quantities, such ingestion may produce profound behavioral changes that are often of a psychotic nature, including hallucinations, delusions, etc. These latter effects are much more likely to occur after intravenous injection than after ingestion. Indeed, the intravenous route is employed for the express purpose of obtaining bizarre mental effects often associated with sexual functions, even to the point of orgasm. This type of abuse has been increasingly frequent in recent years with the changing patterns of drug abuse in various countries.

Although the amphetamines do not induce physical dependence, as measured by the criterion of a characteristic and reproducible abstinence syndrome, it would be inaccurate to state that withdrawal from very large dosages is symptomless. The sudden withdrawal of the stimulant drug which has masked chronic fatigue and the need for sleep now permits these conditions to appear in an exaggerated fashion. Thus, the withdrawal period is characteristically a state of depression, both psychic and physical, which probably reinforces the drive to resume the drug. In this regard, it is much less important and does not compare in magnitude with those that occur with morphine, barbiturates, alcohol and other drugs that create physical dependence. Withdrawal of drugs of the amphetamine type is never threatening to life and requires psychological rather than somatic therapy.

The use of amphetamines by self-administration has increased consistently in recent years, ostensibly as anti-fatigue agents in situations in which it is desired to remain mentally alert for long periods without sleep or rest or to permit increased physical performance. The use of amphetamines as stimulants has also increased markedly in persons who abuse alcohol and/or barbiturates; in many such instances there is dependence on more than one drug. In such cases, the prognosis is poor, the relapse rate is high, and continued dependence on one or more drugs is the rule, especially in prepsychotics or individuals with latent schizophrenia.

Drug Dependence of Khat Type

Khat (Catha edulis Forssk.) is cultivated and consumed in circumscribed areas of East Africa and the Arabian peninsula. The common, and quantitatively most profitable, mode of application is by way of chewing the tender parts of the plant in as fresh a state as possible.

Drug dependence of the khat type is, under the circumstances of its traditional consumption by chewing, characterized by:

(a) Moderate but often persistent psychic dependence as long as its maintenance is at all practical.
(b) Lack of physical dependence.
(c) Absence of tolerance.

The habitual and, in particular, the exaggerated consumption of khat may, on account of its non-amphetamine ingredients (tannins) damage the individual's health. The social and economic consequences of dependence on khat consist, in the main, of the alienation of the user's funds and the erosion of his working capacity and concern both the individual and the community.

Drug Dependence of Hallucinogen (LSD) Type

Drugs of this type include lysergic acid diethylamide LSD, a semisynthetic derivative of ergonovine; psilocybin, an indole found in a mushroom ('teonanacatl,' Psilocybe mexicana); mescaline, the most active alkaloid present in the buttons of a small cactus ('mescal,' 'peyote,' Lophophora williamsii), and in the seeds of some morning glory varieties ('ololiuqui,' Rivea corymbosa L. Hall f.; Ipomcea violacea L.), the active principle of which is closely related to LSD. The mushrooms, cactus buttons and the morning glory seeds are used by certain American Indian tribes in religious ceremonies or are employed by medicine men or women of these tribes in treating illness, usually in ritualistic fashion. Such religious and ritualistic use does not seem to lead frequently to drug dependence. The drugs possess a particular attraction for certain psychologically and socially maladjusted persons who have difficulty in conforming to usual social norms. These include frustrated non-conformists and curious thrill-seeking adolescents and young adults. The drugs are taken for thrills ("kicks"), to alter mood, to change and clarify perception, to induce reveries, and to obtain "psychological insight" into the personality problems of the user. Generally, the drugs are taken orally and in the company of other users. Ingestion of a single dose or of several doses over a period of two or three days is the customary pattern; prolonged or continuous use is unusual. Periodic, rather than continuous, use is favoured by difficulty in obtaining the drugs, rapid development and disappearance of tolerance, and lack of physical dependence on these drugs.

Drugs of the LSD type induce a state of excitation of the central nervous system and central autonomic hyperactivity manifested by changes in mood (usually euphoric, sometimes depressive), anxiety, distortion in sensory perception (chiefly visual), visual hallucinations, delusions, depersonalization, dilatation of the pupils, and increases in body temperature and blood pressure.

Psychic dependence on drugs of the LSD type varies greatly, but it usually is not intense. The thrill-seekers and non-conformists may enjoy the effects of these agents and may wish to repeat them, but if such agents are not readily available, these persons will either do without them or substitute another substance. A minority of users may develop such strong psychic dependence on those substances that they wreck their careers by persisting in using the drugs despite strong social condemnation.

No evidence of physical dependence can be detected when the drugs are withdrawn abruptly.

A high degree of tolerance to LSD and to psilocybin develops rapidly and disappears rapidly. Tolerance to mescaline develops more slowly. Persons who are tolerant to any of these three drugs are cross-tolerant to the other two.

USE, MISUSE AND ABUSE OF AMPHETAMINE-TYPE DRUGS

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Stimulant drugs of the amphetamine type are subject to extensive and increasing misuse and abuse in the United States. Estimates suggest 70 tablets of amphetamine and amphetamine-type are produced legally in the United States for every man, woman, and child. This is almost three times the estimated yearly production of barbiturates. This, in spite of the fact that stimulants have less logical value in medicine than depressants. Although illicit manufacture of amphetamines exists and is apparently on the increase, no estimates of production are available. It is safe to state that the total production is greatly in excess of proper medical need. At least 71 preparations of or containing amphetamine-type drugs are available on the American market for prescription use. These are listed in the attached Appendix.

The use of these stimulants chronically in alcohol and barbiturate addicts in an effort to increase mental or physical performance is a most dangerous practice since it permits the subject to take larger and larger quantities of depressant drugs leading to mental and physical deterioration. In the same hazardous category is the regular use of amphetamines in the morning to antagonize hang-over effects from the 'spree' use of excessive alcohol and barbiturates.

Amphetamine-type drugs are prescribed to reduce appetite in weight reduction programs. This is undoubtedly the largest area for physician misuse. The patient begins to abuse the drug compulsively and often seeks other sources of supply to fulfill his increased need as tolerance develops.

Amphetamines in moderate dosage (5–10 mg) are capable of rendering most individuals more alert, more wakeful (often to the point of insomnia), and less aware of fatigue. Dumping large amounts of surplus amphetamines on the post-war Japanese market where it was, at that time, available without prescription, established a serious drug-abuse problem, especially among juveniles. Probably, the greatest use in the U. S. is by truck drivers and students.

A principal hazard of general use of these drugs by self-administration lies in the fact that the user is rarely capable of making satisfactory evaluation of his performance and is most likely to overmedicate, commonly leading to chronic abuse in neurotic and poorly balanced individuals.

The use of amphetamines in athletics is more wide-spread than is generally admitted. In contrast to the situation with mental performance, studies have demonstrated that amphetamines are capable of driving trained athletes to increased performance in individual athletic events involving strength and endurance.

Amphetamines possess capacity to stimulate the central nervous system. In small doses, this is limited

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Presented at the National Institute on Amphetamine Abuse at Southern Illinois University, February 1966.

to elevation of mood and the induction of a state of 'well-being.' As the dosage is increased, apprehension, volubility, tremor, and excitement occur and with larger doses hallucinations, and even convulsions; the latter being more prominent after large doses given intravenously. Abuse of this class of substances arises from and is perpetuated solely by the psychic drives to attain maximum euphoria. Physical dependence does not develop. Qualitatively, these psychologic effects are similar to those produced by cocaine. A unique feature of the amphetamines is their capacity to produce tolerance. This property is possessed by only a few central nervous system stimulants. Although tolerance develops slowly, progressive increments in dosage permit ingestion of amounts hundreds of times greater than the original therapeutic dose.

Although amphetamines do not induce physical dependence as measured by the criterion of a characteristic and reproducible abstinence syndrome, it would be inaccurate to say that withdrawal of large doses is symptomless. However, it is not comparable to the withdrawal of morphine, barbiturates, alcohol and other substances which create physical dependence. It is never life-threatening.

In closing, it could be pointed out that the amphetamine problem is only one facet of a much larger drug abuse problem which probably involves 5% of the adult population of the United States. The same factors, emotional immaturity becoming manifest more commonly in unfavorable environmental circumstances and precipitated by stressful situations, are common to all types of drug abuse and require the same type of treatment.

Compounds Containing Amphetamine
Amphaplex (Palmedico)
Amvicel (Stuart)
Amvicel-X(10) (Stuart)
Amvicel-X(15) (Stuart)
Biphetamine (Strasenburgh)
Biphetamine-T (Strasenburgh)
Obetrol (Obetrol)
Obocell (Neisler)
Quadamine (Tutag)

Compounds Containing Amphetamine Phosphate, Monobasic, Racemic
Strascogesic (Strasenburgh)

Compounds Containing Amphetamine Sulfate
Benzedrine Sulfate (Smith Kline & French)
Dex-Sed-10 (Carrtone)
Dex-Sed-15 (Carrtone)
Edrisal (Smith Kline & French)
Nobese (Tilden-Yates)
Phantos Preparations (Cooper, Tinsley)
Edrisal w/Codeine (Smith Kline & French)

Compound Containing Dextro-Amphetamine Phosphate
Obocell (Neisler)

Compounds Containing Carboxyphen
Bontril (Carnrick)
Bontril Timed Tablets (Carnrick)

Compounds Containing Dextro-Amphetamine Hydrochloride
Bamadex Sequels (Lederle)
Curban (Pasadena Research)
Gevrestin (Lederle)
Timed Amodex Capsules (Fellows-Testagar)
Timed Pymadex Capsules (Fellows-Testagar)

Compounds Containing Dextro-Amphetamine Sulfate
Amphaplex (Palmedico)
Amplus Improved (Roerig)
Amsustain (Key Pharmaceuticals)
Amvicel (Stuart)
Amvicel-X(10) (Stuart)
Amvicel-X(15) (Stuart)
Appetrol (Wallace)
Appetrol-S.R. (Wallace)
Daprisal (Smith Kline & French)
Dexalme-S Duracap Timed Action Capsules (Meyer)
Dexamyl (Smith Kline & French)
Dexedrine Sulfate (Smith Kline & French)
Dramamine-D (Searle)
Eskatrol Spansule Capsules (Smith Kline & French)
Theptine (Smith Kline & French)
Thora-Dex (Smith Kline & French)
Vi-Dexemin (Smith Kline & French)
Vio-Dex Timelets (Rowell)
Zamatam (Marion)
Zamitol (Marion)

Compounds Containing Dextro-Amphetamine Tannate
Nalertan Tabules (Neisler)
Synatan (Neisler)

Compounds Containing Methamphetamine Hydrochloride
Ambar (Robins)
Amertal (Merit)
Amphaplex (Palmedico)
Carrtussin Syrup (Carrtone)
Desbutal (Abbott)
Desbutal Gradumet (Abbott)
Desoxyn (Abbott)

Desoxyn Gradument (Abbott)
Gerilets Filmtab (Abbott)
Meditussin (Palmedico)
Methedrine (B. W. & Co.)
Obedrin (Massengill)
Obedrin-LA Tablets (Massengill)
Obestat Ty-Med (Lemmon)
Opidice (Boyle)
Secodrin (Premo)
Span-RD (Metro Med)

Compounds Containing Methamphetamine Preparations
Amphaplex (Palmedico)
Obetrol (Obetrol)
Span-RD (Metro Med)

Drugs With Amphetamine-like Action
Meratran (pipradrol)
Ritalin (methylphenidate)
Tenuate (diethylpropion)
Preludin (phenmetrazine)

PHARMACOLOGIC THERAPY IN NARCOTIC DEPENDENCE

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There is among young heroin users a high incidence of hepatitis, bacterial endocarditis, abscesses, and occasional fatal overdoses, even when pure heroin in known amounts is available for self-administration. The social productivity of these heroin users is also below that of their own peer groups, suggesting that they are either preoccupied with drug use, living from one high to the next, or that in some way their capacity or motivation for productive activity is reduced. In the interest of reducing this antisocial activity and its accompanying social deterioration and human misery, the New York Academy of Medicine in 1955, and again in 1963, encouraged medical research on the use of narcotics in the treatment of compulsive narcotics users.

Methadone Maintenance

To date, the most thorough study of the use of such agents has been conducted by Dole and Nyswander and their coworkers (1965, 1966, 1968). Dole and Nyswander started from the position that it seemed "reasonable to look for some medication to block the abnormal reactions of addicts of heroin and permit them to live as normal citizens in the community. Any such medication, to be of practical value, must meet a number of stringent conditions: it must eliminate the euphoric appeal of heroin and the abstinence symptoms that draw addicts back to drug use; it must be sufficiently free from toxic or dysphoric effects that patients will continue with treatment; it must be orally effective, long-acting, medically safe, and compatible with normal performance in work and at school and with responsible behavior in society."

It had been known for more than a decade that low oral doses of methadone would allay the post-withdrawal-abnormality type of narcotic hunger. What Dole and Nyswander were the first to observe was that when the dose of methadone is gradually increased so that it can be given in large oral doses, it induces a cross-tolerance of such a degree that the euphoric effects of other narcotics, even in relatively high doses, cannot be felt. Dole and coworkers have referred to this high degree of tolerance as "narcotic blockade." Thus, the pharmacological rationale of the methadone maintenance treatment is based on two actions of methadone: relief of "narcotic hunger" (of the persistent post-withdrawal abnormality variety), and blockade of euphoric effects.

The technique of stabilization on methadone used by Dole and coworkers consisted of a gradual (6 to 8 week) escalation of dose. When the rate at which the dose is increased is kept below the rate of tolerance development most patients do not experience euphoria or other psychological effects of narcotics, even during stabilization. Since tolerance apparently develops more slowly to autonomic effects, constipation, decreased libido, and increased perspiration may persist for some time after the patient is fully

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tolerant to other effects. The modal stabilization dose is approximately 100 mg/day.

Reports on the current status of the Dole-Nyswander study (1967) indicate that over two-thirds of the more than 700 former chronic heroin users now in treatment are either working or going to school, or both. Many of these patients have been in treatment for more than three years. The amount of known antisocial behavior among treated patients is remarkably low when one considers that the patients selected were largely those who had failed to achieve abstinence after many years of drug use, repeated withdrawal treatments and multiple jail sentences. The current cumulative conviction rate is reported to be 3%. Another dramatic effect of treatment is the decrease in the frequency of the use of illicit narcotics, verified objectively by means of thin-layer chromatography of urine specimens taken each time the patient comes for medication. It is not clear whether the decrease in heroin use is a result of the "blockade" of heroin-induced euphoria or the alleviation of "narcotics hunger," but the less impressive results obtained with cyclazocine suggest that the relief of "hunger" may be the more important factor. The acceptability of this procedure is also another of its remarkable features, with many drug users waiting for an opportunity to obtain such treatment. It is not, however, successful in every case, and 10–15% of patients accepted for treatment are eventually discharged for unacceptable behavior or for failure to progress.

Criticisms of the use of methadone in the rehabilitation of the heroin user have ranged from disappointment with the experimental design of the study to condemnation of the effort on what appears to be largely moralistic grounds. Other criticisms include the charge that (1) it is merely substituting the euphorigenic actions of methadone for those of heroin; (2) it is merely substituting one addiction for another. It would be patently moralistic to reject a useful therapeutic agent merely because the medicine makes the patient feel good. It would also be inappropriate to conclude that patients maintained on methadone require or request frequent increases in dose. Indeed, it is the experience of all who have worked with methadone maintenance that after the stabilization period patients can be maintained on the same dose for months, and in some cases for years.

Patients maintained on methadone are, of course, physically dependent and will exhibit withdrawal symptoms if the drug is discontinued. Obviously, if one chooses to define addiction as being synonymous with physical dependence, then patients on methadone are addicted. However, there is little resemblance between the behavior that patients exhibit while on oral methadone and the behavior of the same patients while on intravenous heroin; and most workers in this field have tried to emphasize that addiction is not an appropriate synonym for physical dependence.

Some narcotic antagonists such as cyclazocine and nalorphine have mild analgesic and psychotomimetic effects. Tolerance develops to these effects, but does not seem to develop to the narcotic blocking action. In common with nalorphine, cyclazocine produces a variety of physical dependence that is in many ways entirely distinct from that produced by any other drugs.

From a pharmacological viewpoint, the patient who takes a narcotic antagonist regularly can expect to avoid the development of physical dependence even if he continues to use narcotics, and the likelihood of a fatal overdose is markedly reduced, if not eliminated. For patients, the idea of being relatively insensitive to narcotics may bolster their capacity to avoid using illicit drugs.

Recent Developments: Amphetamine-Antagonists

Can the rationale for the use of narcotic antagonists in opiate dependence be extended to other forms of compulsive drug use? Schuster and Wilson, at the University of Michigan, and the author, at the University of Chicago, have been seeking pharmacological technics for modifying the self-administration of amphetamines, cocaine, and related agents. Among the agents that have been shown to block or attenuate the effects of amphetamines are the phenothiazines, butyrophenones, depleters of norepinephrine, and inhibitors of the synthesis of norepinephrine.

Speculations on the future of Pharmacotherapy in the treatment and prevention of narcotic dependence:

It has been repeatedly observed that many American drug takers use more than one drug (e.g., opiates plus barbiturates and amphetamines), sometimes for synergistic effects, but often because their drug of first choice is not available. It is not unlikely that such multi-drug users would also shift to alternative substances if, because of some pharmacological intervention, the effects of their preferred drug could not be obtained. According to Nyswander (1967), some patients maintained on methadone who began to use alcohol excessively accepted additional treatment with disulfiram as a condition for continued treatment with methadone.

At present the number of compulsive narcotics users under treatment in the United States by all forms of pharmacological therapy combined is still well under 2% of the estimated total number of users. Under the circumstances, it would be unreasonable to expect such treatments to have a detectable effect on the overall rate of narcotics arrests, the number of hospital admissions, or the crime rate. However, the advent of such patently "medical" approaches and the generally favorable reports of their effectiveness have already had a major impact on the conceptualization of the problem, an impact that is likely to be felt increasingly over the next few years.

TOBACCO (NICOTINE)

Louis Goodman, M.D., and A. Gilman, Ph.D.

About 600 billion cigarettes are smoked annually in the United States alone. The acute effects of tobacco smoking are due primarily to the nicotine content. Next to caffeine, nicotine is the substance most widely used for its effect on mood.

In each of 36 studies summarized in the 1964 Report of the U.S. Public Health Service on "Smoking and Health," a positive correlation was observed between the incidence of lung cancer and cigarette smoking: approximately 11 cigarette smokers die from cancer of the lung for one nonsmoker. Further, correlation between the use of cigarettes and cancers of the oral cavity, larynx, and esophagus has been demonstrated. The rate of pulmonary emphysema is also greater for chronic smokers.

The use of tobacco has long been suspected as a cause of Buerger's disease inasmuch as more than 90% of victims of the disease are smokers and treatment is useless if patients continue to use tobacco in any form.

Nasal, pharyngeal and bronchial irritation may occur as a result not only of ingestion of nicotine but of the irritation from the many other constituents of tobacco or its smoke. Mucosal injury may result from these causes and from the heat generated in smoking.

There is evidence that smoking increases blood pressure and heart rate. And, although there is no proof that use of tobacco causes arteriosclerosis or results in angina pectoris, the induced cardiovascular activity may trigger attacks. Effects of tobacco smoking on motor and secretory activities of the gastrointestinal tract have not been found to be significant, except in unusual cases. A relatively rare sequence to the tobacco habit is a gradual—or occasionally sudden—decrease in visual acuity.

As stated above, tobacco's effects are due primarily to nicotine. Nicotine is an alkaloid which constitutes from 0.5% to 8% of tobacco, averaging about 1.5% in cigarettes. It is one of the most potent drugs known and one of the most toxic, acting with a rapidity comparable to that of cyanamide.

Although nicotine in the 19th century was used in American medicine as an emetic, nauseant, expectorant and antiasthmatic, it now has no therapeutic applications. It acts on a variety of nerve cells and centers and has both stimulant and depressant phases of action. For example, it both increases and slows the heart rate; it affects arteries which can influence heart rate; it can cause changes in blood pressure; it can produce a hormone discharge which accelerates cardiac rate and raises blood pressure.

Nicotine markedly stimulates the central nervous system. Appropriate doses produce tremors in both man and laboratory animals; with somewhat larger

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doses, the tremor is followed by convulsions. The excitation of respiration is a particularly prominent action of nicotine. Since stimulation of the central nervous system is followed by depression, death can result from failure of respiration due to both central paralysis and to blockade of the muscles involved in respiration.

In some sensitive subjects—particularly nonsmokers—the smoking of one cigarette will inhibit a water diuresis for 2–3 hours. Nicotine may result in increased motor activity of the bowel and occasionally in diarrhea. Depending on the dose, the stimulating effect of nicotine on the gut is followed by a stage of diminished intestinal tone and motor activity.

Nicotine is excreted from the body mainly in the liver, secondarily in the kidney, lung and milk of lactating women.

Poisoning may occur from accidental ingestion of insecticide sprays in which nicotine is present. It is said that the nicotine content of one cigar approximates two lethal doses for man, but swallowed in the form of tobacco, nicotine is much less toxic than would be anticipated. Apparently the gastric absorption of nicotine from tobacco taken by mouth is delayed so that vomiting removes much of the tobacco from the stomach.

Tolerance to nicotine develops when the compound is taken repeatedly, as is evidenced by the confirmed tobacco smokers who are unaffected by amounts of the alkaloid which would cause marked symptoms in the beginner.

FACT SHEET ON FEDERAL NARCOTIC AND DANGEROUS DRUG LAWS

Bureau of Narcotics and Dangerous Drugs, U.S. Department of Justice, Washington, D.C. 20537

The term "narcotic drugs" includes opium and its derivatives such as heroin and morphine; coca leaves and its derivatives, principally cocaine; and the "opiates" which are specially defined synthetic narcotic drugs. Four principal statutes—the Narcotic Drugs Import and Export Act, the Harrison Narcotic Act, the Narcotics Manufacturing Act of 1960 and the Marihuana Tax Act—control narcotic drugs and marihuana. These laws are designed to insure an adequate supply of narcotics for medical and scientific needs, while at the same time they are planned to curb, if not prevent, the abuse of narcotic drugs and marihuana. In addition to these laws, there are other Federal legislative measures to lend additional control over narcotic drugs. Since, however, they are designed primarily to aid enforcement of the major statutes, they are not discussed here.

NARCOTIC DRUGS IMPORT AND EXPORT ACT: The Narcotic Drugs Import and Export Act authorizes the import of crude opium and coca leaves for medical and scientific needs in the United States. Import of other narcotic drugs is prohibited. Manufactured drugs and preparations may be exported under a rigid system of controls to assure that the drugs are used for medical needs only in the country of destination.

HARRISON NARCOTIC ACT: The Harrison Narcotic Act sets up the machinery for distribution of narcotic drugs within the country. Under the law, all persons who import, manufacture, produce, compound, sell, deal in, dispense or transfer narcotic drugs must be registered and pay a graduated occupational tax. The law also imposes a commodity tax upon narcotic drugs produced in or imported into the United States and sold or removed for consumption or sale.

Under the Harrison Act, sales or transfers of narcotic drugs must be recorded on an official order form. However, the transfer of narcotic drugs from a qualified practitioner to his patient and the sale of these drugs from a pharmacist to a patient with a lawfully written doctor's prescription are exceptions to this requirement.

NARCOTICS MANUFACTURING ACT OF 1960: The Narcotics Manufacturing Act of 1960 develops a system of licensing manufacturers to produce narcotic drugs. It also provides a method to set manufacturing quotas for the basic classes of narcotic drugs, both natural and synthetic, insuring that an adequate supply of each drug will be available for medicine and science.

MARIHUANA TAX ACT: The Marihuana Tax Act requires all persons who import, manufacture, produce, compound, sell, deal in, dispense, prescribe, administer, or give away marihuana to register and pay a graduated occupational tax. No commodity tax is imposed on this drug. However, a tax is imposed upon all transfers of marihuana at the rate of $1 per ounce, or fraction of an ounce, if the transfer is made to a taxpayer registered under the act.

PENALTY PROVISIONS: Illegal sale or illegal importation of all narcotic drugs and marihuana can mean a penalty of 5 to 20 years in prison and the possibility of a $20,000 fine in addition. A second or subsequent offense receives a penalty of 10 to 40 years in prison with a possible $20,000 fine. There can be no probation or suspension of these offenses.

The penalties for all so-called possession type of offenses range between 2 and 10 years in prison for the first offense and between 5 and 20 years for the second offense. For a third or subsequent offense, the penalty can be from 10 to 40 years in prison. There can be no probation or suspension of sentence for a second or subsequent offense.

Because of the serious nature of narcotic addiction among young persons, the law establishes special penalties for the sale of narcotic drugs to a minor. The penalty for unlawful sale of heroin to a minor by an adult is a 10 year mandatory sentence in prison, while a penalty of 10 to 40 years in prison is levied when marihuana or other narcotic drugs are sold to a minor.

In 1966 special legislation was enacted to allow those violators who are narcotic addicts to return to useful, productive lives. The Narcotic Addict Rehabilitation Act provides: (1) civil commitment of certain addicts in lieu of prosecution for Federal offenses, (2) sentencing of addicts to commitment for treatment after conviction of Federal offenses, (3) civil commitment of persons not charged with any criminal offense, (4) rehabilitation and posthospitalization care programs and assistance to States and localities.

All states have either adopted the Uniform Narcotic Act recommended in 1937 for the specific purpose of making all state narcotic laws analogous, or modified it to fulfill the state's individual needs. Similar to the Federal laws, state laws restrict legitimate traffic to qualified manufacturers, wholesalers, druggists, practitioners and researchers.

FEDERAL DANGEROUS DRUG LAWS: Three groups of dangerous drugs—depressants, stimulants, and hallucinogens—are controlled by the Drug Abuse Control Amendments to the Federal Food, Drug and Cosmetic Act passed in 1965 and amended in 1968.

DRUG ABUSE CONTROL AMENDMENTS: These amendments control drug abuse in two ways. One, they provide for stronger regulations in the manufacture, distribution, delivery, and possession. Two, they provide strong criminal penalties against persons who deal in these drugs illegally.

Thus, all registered manufacturers, processors and their suppliers, wholesaler druggists, pharmacies, hospitals, clinics, public health agencies, and research laboratories must take an inventory, keep accurate records of receipts and sales of these drugs and make their records available to Bureau of Narcotics and Dangerous Drug agents for examination. No prescription for a controlled drug older than 6 months can be filled nor can refills be made more than five times in the 6 month period.

PENALTY PROVISIONS: Illegal possession of the dangerous drugs can mean a maximum penalty of 1 year in prison or a $1,000 fine, or both. However, the offender may be placed on probation for a first offense. If he meets the condition of his probation, the court may set aside his conviction. A second offense allows for probation, but does not allow for the conviction to be set aside. The third offense calls for a maximum prison term of 3 years or a fine of $10,000, or both.

A person who illegally produces, counterfeits, sells, manufactures or possesses dangerous drugs with intent to sell, may receive a maximum penalty of not more than 5 years in prison or a $10,000 fine, or both.

Because of the serious consequences of drug abuse among young people, special penalties are provided for those over 18 years of age who sell or give any of the controlled drugs to persons under the age of 21. The first offense carries a maximum penalty of 10 years in prison, or a fine of $15,000, or both; a second offense increases the maximum prison term to 15 years, or a fine of not more than $20,000, or both.

Many states have adopted legislation for dangerous drugs similar to the controls at the Federal level.

CHRONOLOGY OF IMPORTANT FEDERAL LEGISLATION REGARDING NARCOTICS AND DANGEROUS DRUGS

1906—Federal Pure Food and Drug Act. Regulates the use of patent medicines containing opiates.

1914—Harrison Narcotic Drug Act. Regulates manufacture and distribution of morphine, cocaine and other narcotics within the country. Still the chief federal law for controlling illicit narcotic traffic.

1922—Narcotic Drugs Import and Export Act. Provides heavy penalties for illegal import and export of narcotic drugs.

1937—Marihuana Tax Act. Marihuana was placed under federal control through taxing power, providing the same type of controls over marihuana as the 1914 legislation placed over narcotic drugs.

1946—Harrison Narcotic Act Amendment. The 1914 law was amended to include synthetic substances having addiction-forming or addiction-sustaining qualities similar to cocaine or morphine.

1951—Boggs Amendment. Introduced mandatory minimum sentences for all narcotic drug and marihuana offenses and prohibited suspension of sentences and probation for second offenders.

1956—Narcotic Drug Control Act. Raised mandatory minimum sentences. With the exception of first offenders for possession only, it prohibits suspended sentences, probation and parole.

1960—Narcotics Manufacturing Act. Provides for licensing and establishment of manufacturing quotas for all manufacturers of narcotic drugs.

1965—The Drug Abuse Control Amendments to the Federal Food, Drug and Cosmetic Act provide for stronger regulation of the manufacture, distribution, delivery, and possession of stimulants, depressants and hallucinogens. They also provide strong criminal penalties against persons who deal in these drugs illegally. The Food and Drug Administration of the Department of Health, Education and Welfare was given stronger enforcement powers to prevent drug counterfeiting. The amendments were effective February 1, 1966.

1966—Narcotic Addict Rehabilitation Act. A significant step toward treatment and rehabilitation of narcotic addicts. This legislation, effective February, 1967, provides for civil commitment.

1968—Drug Abuse Control Amendments to Federal Food, Drug and Cosmetic Act of 1965 increase the penalties for anyone who illegally produces, sells or disposes of dangerous drugs, and imposes misdemeanor penalty for possession.

1969—A Supreme Court decision removed two of the Federal Government's major legal weapons against marihuana traffic when it held that the Marihuana Tax Act is unenforceable when the accused claims Fifth Amendment privilege against self-recrimination. Also, it declared as unreasonable the law's presumption that a man with marihuana in his possession knows that it was imported illegally, thus violating due process of law.

NOTE: Existing State legislation dealing with dangerous drugs is not uniform; laws vary widely in terms of drugs included and the penalties invoked. Persons dealing with drug abuse education should learn their State laws and city ordinances on marihuana, narcotics and dangerous drugs.

3/ SUPPLEMENTARY REPORTS ON DRUGS

LEGAL ASPECTS OF DRUG ABUSE

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Answers to the questions of how to stem the tide of drug abuse and bridge the gulf which separates the generations will in all probability not be found in law. Drug abuse may only be a tiny corner of the larger problem of rebellion and unrest among youth, yet we must deal with each facet of the problem and when the law ruins lives, fabricates criminals out of whole cloth and debases itself in the eyes of our youth, it must be carefully scrutinized.

The Present Legislative Structure

In surveying State and Federal legislative action, one sees a spectrum running from imposition of the harshest penalties to failure to enact any legislation at all. The majority of States approach the legislative control of drugs in a uniform manner that ignores varying physiological and psychological effects on the body. Federal legislation, unlike the State acts based largely on the Uniform Narcotic Act passed in 1937, distinguishes between "hard" drugs (opium, morphine, etc.) and the "soft" drugs (marihuana). Many States subsequently followed this division of "hard" and "soft" drugs. The States continued to use the "soft" drug classification when the depressant and stimulant drugs as well as the hallucinogens came into popularity. The effect of this was an incongruous jumble of statutory provisions in no way relating punishment to the potentiality for physical harm.

A second basic flaw in the laws of many States, a flaw which follows naturally from the improper classification, is the establishment of penalties which are greatly out of proportion to the crime committed. In Massachusetts, to offer another person a marihuana cigarette and have this person accept it carries a penalty of ten to 25 years for the first offense and 20 to 50 years for a second offense. Georgia offers 20 years to life for the first offense, and a mandatory death penalty for the second offense.

One of the most objectionable features of the laws is the fact that a person with a drug problem is discouraged from seeking medical help. Massachusetts law requires physicians and hospitals treating persons suffering from the chronic use of narcotic drugs to furnish the Department of Public Health a statement giving name, address, height, weight, date of birth, color of eyes, color of hair, date treated and the name of the narcotic drug the person used or suffered from. The physician who refuses to comply with this law which constitutes a mandatory breach of the confidentiality of the physician-patient relationship may be punished by a fine of $2000 or two years in jail for the first offense. The argument that such a statute constitutes an invaluable, indispensable aid to law enforcement has not been borne out by facts and figures which have been requested from the Department of Public Health by the Massachusetts Medical Society.

Federal Law

The Federal law is filled with inconsistencies. Until June of 1968, possession of LSD was not punished under Federal law, although manufacture and sale were: The theory was that it is better for the law to use its efforts to curb trafficking in the drug than it is to punish those who are users of the drug; this made sense and was the beginning of a sophisticated approach to the drug abuse problem. Congress voted to punish possession of LSD in June 1968 by one year in jail or a $1,000 fine, a penalty far milder than the penalty for possession of marihuana, a substance less dangerous than LSD. One who possesses marihuana may get a possible sentence in a Federal penitentiary of from two to ten years. A person who is convicted of selling marihuana without having secured and paid for the appropriate tax stamp is punished by a mandatory five-year penitentiary sentence and this sentence cannot be suspended nor the violator placed on probation.* The judge has no choice but to send the person away to a Federal penitentiary for five years. Apparently Congress has seen fit to escalate the penalties in the realm of LSD, rather than to review the unrealistic marihuana penalties.

Impact of Present Legislation

The question must ultimately be asked as to whether the punitive orientation of the present drug laws is effectively deterring young people from using these drugs. The incidence of drug use as indicated in the spiraling number of arrests and reported in the surveys taken among young people suggest that it is not. The gangster-style raids, the ineffective prosecution, and the inconsistent results of justice, depending upon the orientation of the police, prosecutor and judge, make it clear that we are due for a change.

This is not to say that drug abuse is to be condoned; in fact, drug abuse strikes a blow at the very fiber of our society; if every time a young person is bored or faced with an anxiety-producing situation, he "turns on" or "turns off" or whatever the current terminology is, how is he ever going to mature or make a significant contribution to the society which needs his participation and his ideas and his drive so badly? It is far more likely, however, that the answer lies in research, in treatment, in education, and most important, in frank discussion of the problem, rather than in the application of harsh punitive measures which can do little more than give a criminal orientation to a youngster already severely disturbed.

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* Punishment for non-payment of tax stamp was declared unconstitutional by the Supreme Court in May 1969.

From *Drugs and Youth*, Charles C. Thomas Publishers, 1969.

THE MARIHUANA PROBLEM: AN OVERVIEW

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Current knowledge of the use of marihuana, its physical and mental effects, and its relation to crime and to other drug use are reviewed. The authors feel that a reappraisal of the social and legal policies regarding marihuana use is needed in view of the rapid increase in its use despite the severe legal penalties prescribed.

The combination of a very rapid increase in marihuana use and the severe penalties prescribed for violation of the marihuana laws has brought about a social crisis. These two phenomena are not necessarily independent. The extreme legal penalties and the gross exaggerations of the consequences of marihuana use as fostered by the Federal Bureau of Narcotics make it an ideal target for rebellious youth to point to as an example of adult hypocrisy.

Physical and Mental Effects

No long-term physical effects of marihuana use have been demonstrated in this country, although more current studies are needed before this issue can be resolved with any degree of certainty. Eastern studies of chronic users, who consume several times the amounts generally used in this country, report a variety of cannabis-induced physical ailments. Conjunctivitis is the most frequent, followed by chronic bronchitis and various digestive ailments. Sleep difficulties frequently occur, as is the case with opiate users in this country. It is interesting to note that from 25 to 70 percent of regular hashish users in two Eastern surveys reported some impairment in physical health due to the use of the drug.

There have been several cases of marihuana-induced temporary psychosis reported in this country. Panic reactions are not uncommon among inexperienced users, and such reactions occasionally develop into a psychotic episode. These very rarely last more than a day or so, and they do not usually require hospitalization.

On the other hand, in India and other Eastern countries, cannabis has long been regarded as an important cause of psychosis. One study reported that 25 percent of some 2,300 men admitted to psychiatric hospitals were diagnosed as having cannabis psychoses; of the total male admissions 70 percent of the patients admitted to smoking cannabis, and one-third were regular users. These studies are definitely not in agreement with the findings in this country, and many Western authorities question the adequacy of both the diagnoses made and the methodology of the studies themselves.

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While systematic studies of the recent wave of young marihuana users are not yet available, clinical observations indicate that regular marihuana use may contribute to the development of more passive, inward-turning, amotivational personality characteristics. For numerous middle-class students, the subtly progressive change from conforming achievement-oriented behavior to a state of relaxed and careless drifting has followed their use of significant amounts of marihuana.

Relation of Marihuana to Other Drug Use

Although present-day marihuana has not been shown to predispose to heroin use, it does play a role in initiation to other potent drugs, particularly LSD. To the extent that marihuana contributes to a general disregard for the realistic consequences of behavior in young persons, its use increases the probability of the abuse of other more dangerous drugs. Many marihuana users would welcome the opportunity to try hashish and, if it were available, many would probably continue to use it in preference to the low-potency marihuana. Of course, the use of hashish does not necessarily lead to excess any more than does a preference for distilled liquor over beer or wine. However, the history of mind-altering drugs shows that excessive indulgence increases sharply as more potent preparations of a given drug become available.

Social Policy

Social policy with respect to marihuana and other psychoactive drugs has many dimensions. The most basic issue is whether or not the prohibition of behavior whose direct effects are limited to the individual is within the function of the state. Those who feel it is not argue that the state has no more right to intervene with respect to the use of harmful drugs than it does with regard to harmful overeating.

Those who take the contrary position argue that the harms are not limited to the individual but burden society in a variety of ways; hence the state is entitled to prohibit its use in the public interest.

An objective assessment of the threat or benefit to society resulting from the non-medical use of a drug should consider: physiological effects resulting from occasional or chronic use; tendency to produce physiological or psychological dependence as a function of period use; release of antisocial behavior; effect on motor activity, especially driving safety; and tendency to produce long-lasting personality changes. Other relevant considerations are: cost; ability to control and measure potency; convenience of mode of intake, oral vs. intravenous, for example; capacity for self-titration to control effect; protection against overdose; availability of an antidote; specific effects attainable without unpredictable side effects; predictable length of action; hangover or other short-term properties which may spill over to affect work or other activities; ability to return to normalcy on demand; and ability to detect the drug, as for monitoring drivers, etc.

One of the most neglected questions in evaluating drug effects concerns the individual benefits which motivate the user. Drug use in many instances may well be an attempt to alleviate symptoms of psychiatric illness through self-medication. In some cases, marihuana use might postpone or prevent more serious manifestations of an illness. Especially for recreational drugs, such as alcohol and marihuana, an objective assessment of user motivation should consider: effectiveness in producing pleasure, relaxation, and aesthetic appreciation; enhancement of appetite and other senses; enhancement of interpersonal rapport, warmth, and emotionality; utility of variety or newness or perception and thinking; and enhancement of enjoyment of vacations, weekends, or other periods devoted to recreation, rest, and pleasure.

In considering the effectiveness of legal sanctions against the use of a drug, three related questions must be considered at the outset: 1) How many persons would abuse the drug if legal controls were removed or not adopted? 2) Do the laws deter use, or perhaps encourage it, as has been suggested with relation to rebellious youth? 3) Is the drug abuser a sick person who, if one drug is prohibited, will find another drug or some equally destructive behavior as a substitute?

Clearly, if the law protects against a non-existing harm, society is better off without the law. The recent elimination of all laws pertaining to written pornography in Denmark, for example, apparently resulted in no ill effects. The incidence of marihuana use as opposed to LSD use supports the position that legal penalties are by no means the overriding determiner of drug usage. The number of persons who have used marihuana is several times that for LSD and is increasing in spite of severe penalties. LSD usage is apparently declining because of concern over the hazards rather than because of any deterrent effect of the relatively moderate laws.

The argument that the drug abuser would simply find another means of escape or self-destructive behavior if the drug were not available is probably only partially correct. It is clear that persons are more vulnerable to the abuse of drugs at certain times in their lives, such as during adolescence or other highly stressful periods. If a potential drug-of-abuse is unavailable at these times, an undesirable chain of events may well be avoided.

Concerning the kind of drug-control laws which should be enacted and enforced, there is general agreement that the government has not only the right but also the obligation to enforce certain practices with regard to the distribution of drugs.

Regulation, as opposed to prohibition, permits the orderly control of potency and the conditions of sale, such as age of purchaser, hours of sale, and licensing. It also permits taxation and eliminates the support of organized crime as well as the criminogenic aspects of forcing the user to deal with illegal sources. On the other hand, prohibition of sale clearly indicates social disapproval, whereas open sale does not.

Arguments for criminal sanctions against the drug user primarily stress: 1) their deterrent effect and 2) the aid such laws give to enforcement agencies in apprehending sources of supply. Major arguments against such laws stress that enforcement inevitably encourages the violation of constitutional guarantees of privacy, as well as various other practices, such as informers posing as students, hippies, or other potential drug users, which are ethically questionable though technically legal.

The social control of drug use is most difficult to handle via legal means when the drug in question permits both use and abuse: e.g., alcohol and marihuana. The problem of penalizing the majority because of the abuse by the minority was specifically dealt with by the Supreme Court at the time of the Volstead Act. The Court ruled that the state had the right to deny access to alcohol to those who would not abuse it in order to remove the temptation from those who would abuse it.

On a few occasions, exceptions have actually been carved out of the law to permit use of a drug otherwise prohibited: e.g., sacramental use of wine and religious use of peyote by the Indians. More frequently, society has informally disregarded the enforcement of the law for various groups, conditions, or in certain districts of the city. For example, during the 40s, police frequently overlooked the use of marihuana by jazz musicians because they were otherwise productive and did not cause trouble. Another means of allowing use but controlling abuse is through compulsory treatment.

Conclusion

What is especially needed is a concerted effort to produce congruence among the various drug policies and laws. What we have at present is an assortment of approaches which are not only lacking in consistency but often operate in clearly opposite directions. Much of the incongruity is based on unrecognized attitudes and fears which must be made conscious and explicit before a congruent policy can emerge. One means of forcing some of the most glaring inconsistencies into perspective is to treat alcohol abuse and drug abuse as a single problem.

Part of the lack of congruence among drug policies in this country may be due to the fact that economic and technological factors are changing at a faster rate than are cultural attitudes and values. The drug laws in this country have always been an attempt to legislate morality, although they have been justified in terms of preventing antisocial acts. These laws and attitudes evolved at a time when the Protestant ethic and the competitive achievement-oriented value system were very much in dominance. The freely chosen, passive withdrawal to life of drug-induced fantasy was an extremely threatening concept.

Now we are told we are verging on an economy of abundance rather than scarcity; an age of automation will eliminate half or more of the labor force necessary for the production of goods. The concept of work will have to be redefined to include non-productive pursuits which are now considered hobbies; a guaranteed annual income program will likely be in effect within five or ten years. The children of today's middle class have never experienced a depression or any appreciable difficulty in satisfying their material needs. They do not share the materialistic value system to the same extent as their parents because they have little fear of material deprivation.

There also appears to be an increasing acceptance of pleasure in its own right rather than as something that needs to be earned as a reward for hard work. If the age of economic abundance, automation, and greatly increased leisure time becomes a reality, excessive drug use will be seen as a threat to the individual—not as a threat to society.

In conclusion, whether or not the age of abundance arrives, social policy, with some minor reversals, will probably move in the direction of permitting greater individual freedom with respect to drug use. Society will promote the concept of allowing adults the privilege of informed decision. The crucial problem that will remain is that of protecting those who are too young to make an informed decision.

PREVENTION OF DRUG ABUSE

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Prevention and Education

Prevention and education efforts aimed at the student population demand careful preparation and implementation. Even high-school students are extremely sophisticated about drugs. We are constantly impressed at speaking appearances before high school and college audiences about:

1. The extent of accurate knowledge mixed with misinformation about all drugs, not just LSD and marihuana, but barbiturates, amphetamines, etc.; and
2. The suspicion with which students approach information supplied by "official sources."

Scare techniques are not only ineffectual but even detrimental to conveying needed information about hazards of drug abuse. With the present incidence of marihuana use, many students have either experienced or observed first-hand the effects of this drug. They know that psychoses or other grave consequences are not an inevitable concomitant of smoking one marihuana cigarette.

To be effective, a preventive educational effort must be carefully tailored to specific population groups and must be based on the best educational and scientific footing available.

Alienation

In trying to understand scientifically the problem of drug abuse, one must look beyond the specific problems of such agents as LSD, marihuana, amphetamines and barbiturates to some of the underlying causes of widespread drug use and abuse. We live in a drug-oriented culture. From aspirin to sleeping pills, from tranquilizers to "the pill," Americans of all ages are ingesting drugs in greater variety and number than ever before. If we are to get to the root of this problem of drug abuse, we must investigate and identify the underlying problems which lead people to choose to distort or ward off reality with drugs.

One way of conceptualizing the problem is to view drug abuse in the student population in the broader context of the nature and extent of "casualties" of the educational system. Through our interest in school and college mental health, suicide prevention, and alcoholism, we have become increasingly aware that a fair percentage of our brightest and most competent youth are not "succeeding" in their encounter with the higher educational system.

Behavioral scientists use the term "alienation" in describing the cross-generational disease epitomized by the youth-coined term "don't trust anyone over 30." Alienation has been characterized as: "rebellion without a cause . . . rejection without a program . . . a refusal of what is without a vision of what should be."

Lapses in communication between generations were noted by Greek philosophers over 2,000 years

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Excerpted from Testimony Before the Subcommittee on Juvenile Delinquency of the Committee on the Judiciary, U.S. Senate, March 1968.

ago, and more recently were manifested in American society by the so-called "lost generation" of the 1920's and the "silent generation" of the 1950's. However, the current problem of alienation in the United States is wider, deeper, and more diffuse than at any previous time in our history. It affects the rich and the poor, the college student and the school drop-out, the urban and the rural youngster. The number of persons, both young and old, beset by alienation is far greater than ever seen in any previous generation.

Because many alienated youngsters question the relevance of major societal values and institutions, they find themselves unable to learn from the various opportunities that presently are available to them. As Freedman and Brotman point out . . . "To ask one of the youngsters, as one of the authors did, 'Where's the action?' elicits a scornful answer: "There's only action if you have a high." The implication is clear; what is meaningful is the subjective state. If an undrugged state is defective, myopic, why not alter perception through drugs and create a new 'reality?' Some youngsters who feel helpless to accommodate to or change an unacceptable world, consciously choose to alter their own . . . Their most frequent statement is that life is a 'drag.' It lacks meaning for there is no engagement; the future is unknown but certainly horrible. Since you cannot alter the world or determine the direction in which it will go, you must alter your state of consciousness and perception, that is, see and experience the world through a 'high.' Any alteration is acceptable, and thus, the barbiturate user can describe to you the joys of a 'drowsy high' and the amphetamine user will talk about the 'high' he gets on benzedrine —and likewise for the LSD, marihuana, and heroin abuser. All that is important is in one's subjective state. Perceptions and beliefs of the square world or the non-drug world are superficial, distorted, meaningless . . . ." This rejection of many goals of society, the unwillingness to model themselves on any stable adult leaders and the inability to acquire the necessary attitudes and skills for responsible adult behavior, make urgent the development of new and innovative approaches to bridge to intergenerational gap.

If this is not done, there are serious dangers that large proportions of current and future generations will reach adulthood embittered towards the larger society, unequipped to take on parental, vocational and other citizen roles, and involved in some form of socially deviant behavior. If we are to solve the problem of drug abuse, it is critical for us to focus on and try to solve the root causes of alienation.

DRUG USE AND STUDENT VALUES

KENNETH KENISTON, PH.D., Associate Professor of Psychiatry, School of Medicine, Yale University

In the comments to follow, I will argue that student drug use is closely related to pressures on American students, and is but a variant of values that are shared by many and perhaps most American undergraduates today. To be sure, only a small minority turn toward drugs; but the members of this minority group are but first cousins to the more normal college student. In particular, the student drug user shares with his non-drug-using classmates an active search for meaning through intense personal experience.

In order to understand the values shared by many American college students, we must begin by considering some of the pressures that affect today's students. With regard to drug use, two pressures are particularly important: the pressure toward cognitive professionalism, and the pressure toward psychological numbing.

Cognitive Professionalism

The past two decades have seen a revolution in our expectations about college students. Rising standards of academic performance in primary and secondary schools, the baby boom of the war, the slowness with which major American universities have expanded their size—all have resulted in increasing selectivity by the admissions offices of the most prestigious American colleges and universities. Furthermore, once a student is admitted to college, higher admission standards have meant that more could be demanded of him; students who a generation ago would have done A work now find themselves doing only C work with the same effort. The sheer volume of required reading and writing has increased enormously; in addition, the quality of work expected has grown by leaps and bounds. Finally, for a growing number of young Americans, college is but a stepping stone to professional and graduate school after college; and as a result, consistent academic performance in college increasingly becomes a prerequisite for admission to a desirable business school, medical school, law school or graduate school.

Not only have academic pressures mounted in the past generation, but these pressures have become more and more cognitive. What matters, increasingly, to admissions committees and college graders is the kind of highly intellectual, abstracting, reasoning ability that enables a student to do well on college boards, graduate records and other admission tests, and—once he is in college or graduate school—to turn out consistently high grades that will enable him to overcome the next academic hurdle. And while such intellectual and cognitive talents are highly rewarded, colleges increasingly frown upon emotional, non-intellectual and passionate forms of expression.

In contrast to these cognitive demands, there are extremely few countervailing pressures to become

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more feeling, morally responsible, courageous, artistically perceptive, emotionally balanced, or interpersonally subtle human beings. On the contrary, the most visible pressures on today's students are in many ways anti-emotional, impersonal, quantitative and numerical.

Increasingly, then, one of the major pressures on American students is a pressure to perform well academically, to postpone and delay emotional satisfactions until they are older, to refine and sharpen continually their cognitive abilities. As a result, students today probably work harder than students in any other previous generation; a bad course or a bad year means to many of them that they will not get into graduate school. Taking a year off increasingly means running the danger of getting drafted and being sent to Vietnam.

Thus, while the systematic quest for cognitive competence occupies much of the time and effort of the pre-professional student at today's selective colleges, this pursuit does little to inform the student about life's wider purposes. One of the peculiar characteristics of professional competence is that even when competence is attained, all of the other really important questions remain unanswered: what life is all about, what really matters, what to stand for, how much to stand for, what is meaningful, relevant and important, what is meaningless, valueless and false. Thus, for many students, the pursuit of professional competence must be supplemented by another, more private and less academic quest for the meaning of life. Academic efforts seem, to a large number of students, divorced from the really important "existential" and "ultimate" questions. In this way, the student's private search for meaning, significance and relevance are experienced as unconnected with or opposed to his public exertions for grades, academic success and professional competence. How students search for significance and relevance of course varies enormously from individual to individual; but as I will later suggest, drug use seems—to a small group of students—a pathway to the pursuit of meaning.

Stimulus Flooding and Psychological Numbing

Every society contains pressures and demands which its members simply take for granted. Thus, the pressure for extremely high levels of cognitive efficiency seems to most of us a necessary and an even desirable aspect of modern society. Our response to the second social pressure I want to discuss is even more unreflective and automatic. This second pressure has to do with the sheer quantity, variety and intensity of external stimulations, imagery and excitation to which most Americans are subjected. For lack of a better label, I will term the condition one of increasing "stimulus flooding."

Most individuals in most societies have at some point in their lives had the experience of being so overcome by external stimulation and internal feelings that they gradually find themselves growing numb and unfeeling. Medical students, for example, commonly report that after their first and often intense reactions to the cadaver in the dissecting room, they simply 'stop feeling anything' with regard to the object of their dissection. Or we have all had the experience of listening to so much good music, seeing so many fine paintings, being so overwhelmed by excellent cooking that we find ourselves simply unable to respond further to new stimuli. Similarly, at moments of extreme psychic pain and anguish, most individuals "go numb," no longer perceiving the full implications of a catastrophic situation or no longer experiencing the full range of their own feelings.

This psychological numbing operates, I submit, at a great variety of levels for modern man. Our experience from childhood onward with the constantly flickering images and sounds of television, films, radio, newspapers, paperbacks, neon signs, advertisements and sound trucks, numbs us to many of the sights and sounds of our civilization. The exposure of the most intelligent men to a vast variety of ideologies, value systems, philosophies, political creeds, superstitions, religions and faiths numbs us, I think, to the unique claims to validity and the special spiritual and intellectual values of each one: we move among values and ideologies as in a two-dimensional landscape.

In all these respects, modern men confront the difficult problems of keeping stimulation from without to a manageable level, while at the same time protecting themselves against being overwhelmed by their own inner responses to the stimuli from the outer world. Defenses or barriers against both internal and external stimulation are, of course, essential in order for us to preserve our intactness and integrity as personalities. From earliest childhood, children develop thresholds of responsiveness and barriers against stimulation in order to protect themselves against being overwhelmed by inner or outer excitement. Similarly in adulthood, comparable barriers, thresholds and defenses are necessary, especially when we find ourselves in situations of intense stimulation.

Thus, in at least a minority of Americans, the normal capacity to defend oneself against undue stimulation and inner excitation is exaggerated and automatized, so that it not only protects but walls off the individual from inner and outer experience. In such individuals, there develops an acute sense of being trapped in their own shells, unable to break through their defenses to make contact with experience or with other people, a sense of being excessively armored, separated from their own activities as by an invisible screen, estranged from their own feelings and from potentially emotion-arousing experiences in the world. Presumably most of us have had some inkling of this feeling of inner deadness and outer flatness, especially in times of great fatigue, let-down, or depression. The world seems cold and two-dimensional; food and life have lost their savor; our activities are merely going through the motions, our experiences lack vividness, three-dimensionality, and intensity. Above all, we feel trapped or shut in our own subjectivity.

Each of the two pressures I have discussed—cognitive professionalism and stimulus flooding—evoke characteristic responses among today's American students. The pressure for cognitive professional competence leads to a search for meaning in other areas of life; the feeling and fear of psychological numbing leads to a pursuit, even a cult, of experiences for its own sake. And use and abuse of psychoactive drugs by students is closely related to these two themes in student values.

The Search for Meaning

Among today's self-conscious students, the statement, "I'm having an identity crisis" has become a kind of verbal badge of honor, a notch in the gun, a scalp at the belt. But although the term "identity crisis" can be easily parodied and misused, it points to fundamental issues of adolescence in all societies that are particularly heightened in our own society. Since academic pursuits, on the whole, tell the student so little about life's ultimate purposes, students are turned back upon their own resources to answer questions like, "What does life mean? What kind of person am I? Where am I going? Where do I come from? What really matters?"

To understand this search for meaning, we must recall that many of the traditional avenues to meaning and significance have dried up. Traditional religious faith is not, for most sophisticated undergraduates, a means of ascertaining the meaning of life: traditional religions often seem to students to be worn out, insincere, or superficial. Similarly, the great classic political ideologies, whether they be political liberalism, conservatism, marxism, or fascism, arouse relatively little interest among most undergraduates. Nor does the "American Way of Life," as epitomized by 100% Americanism and free enterprise, stir most students to enthusiasm, much less provide them with answers about life's ultimate purposes.

One by one, then, many of the traditional sources of meaning have disappeared at the very same time that academic life itself, because of its intense pressure and professional specialization, seems to many students increasingly irrelevant to their major existential concerns. Where, then, do students turn?

The Cult of Experience

The cult of experience has often been discussed as a defining characteristic of American youth cultures. Central to this cult is a focus on the present—on today, on the here-and-now. Thus, rather than defer gratification and enjoyment for a distant future, immediate pleasure and satisfaction are emphasized. Rather than reverence for the traditions of the past, experience in the present is stressed. Psychologically, then, such human qualities as control, planning, waiting, saving, and postponing on the one hand, and revering, recalling, remembering and respecting on the other, are equally deemphasized. In contrast, activity, adventure, responsiveness, genuineness, spontaneity and sentience are the new experiential values. Since neither the future nor the past can be assumed to hold life's meaning, the meaning of life must be sought within present experience, within the self, within its activity and responsiveness in the here-and-now.

Disaffiliation and Drugs

The two student values I have discussed—the search for meaning and the cult of experience—are intimately related to the pressures I have outlined earlier. The search for meaning is made more urgent by the amount of time and energy the average student must spend in pre-professional academic pursuits that often appear to him irrelevant to his basic concerns. And the cult of experience is intensified by the fear or feeling in many undergraduates that, instead of becoming more open to themselves and to experience, they are becoming increasingly numbed and closed off from all that is exciting and beautiful. Both of these values are, as well, related to the use and abuse of drugs by students. For such is the cultism and propaganda that surrounds drugs, especially the hallucinogens, that many students have come to feel that states induced by these drugs will automatically produce a revelation of life's meaning, or at least an experience which itself will be highly significant and illuminating. Similarly, to the undergraduate who feels himself unduly walled-off from experience, drugs like the hallucinogens and the amphetamines (which intensify and alter ordinary states of consciousness) may seem a chemical sledge hammer for breaking out of his shell.

Obviously, despite the congruence of drug use with important student values in American colleges, the vast majority of American students do not seek meaning and experience primarily via psychoactive compounds. Despite the presence of some values which are consistent with drug use, most students have other values that argue against drug use. It is only a minority who are persuaded to choose drugs as a primary means of searching for meaning.

I doubt that it is possible to present an exact portrait of the type of student who is likely to use and abuse drugs. My own experience with student drug-users convinces me that there are many different motives for drug use and abuse, and there are many different factors—psychological, sociological, cultural and situational—that determine whether one student will use drugs while another will not. But despite the diversity of student types who may become involved in drug use, there is, I believe, one type that is particularly prone to drug abuse. I will call such students 'disaffiliates,' and will summarize some of the factors that predispose these students toward drug abuse. The defining characteristic of the disaffiliate is his generalized rejection of prevalent American values, which he rejects largely on esthetic, cultural and humanistic grounds. Such students are rarely political activists, and they are rarely concerned with the issues of economic, social and political justice that agitate many of their classmates. For these students, the problem is not political or social, but esthetic: American society is ugly, trashy, cheap and commercial; it is dehumanizing; its middle-class values are seen as arbitrary, materialistic, narrow and hypocritical. Thus, those conventional values which deem experimentation with drugs—or experimentation of all kinds—illicit, are strongly rejected by disaffiliates; for them, what matters is somehow to seek a way out of the 'air conditioned nightmare' of American society.

A second characteristic of disaffiliates is a more or less intense feeling of estrangement from their own experience. Such students are highly aware of the masks, facades and defenses people erect to protect themselves; and not only do they criticize these defenses in others, but even more strongly in themselves. These feelings of estrangement are often accompanied by considerable depression and a strong sense of personal isolation. Indeed, depression following the loss of an important relationship is commonly found in the immediate background of the student who begins to abuse drugs. For the student with intensified feelings of estrangement from himself and others, drugs that promise to heighten experience seem a tempting way out of his shell.

A third relevant characteristic of disaffiliates is a fantasy of fusion and merger, which contrasts sharply with their current feelings of estrangement. In the background, many of these students have a concept of an almost mystical fusion with nature, with their own inner lives, or above all with other people—a kind of communication that requires no words, a kind of oneness with nature or the world that has characterized intense religious experience for centuries, a special kind of automatic oneness with another. For an undergraduate with an especial longing for oneness with others, the hallucinogens are especially tempting. For one characteristic of the drug experience is a weakening or breaking down of the boundaries of the self such that many individuals in fact report feelings of oneness, merger and fusion with others.

On several grounds, then, the disaffiliate is strongly attracted by drugs.

Drug Use and Student Values

It will not do to repudiate students who misuse drugs as moral lepers and addicts without trying to understand their motives for drug use, and the values and goals they pursue. These motives are rarely simply anti-social or thrill-seeking. On the contrary, they almost always involve a legitimate (if misguided) search for ultimate meaning and contact with the world. In dealing with individual drug users, then, we must attempt to provide the student with alternate routes to attain his valid goals. Although student drug users are a small minority, they point to the inability of our society to enlist the commitments of a talented minority. If we could understand why, it might point not only to how we could "cure" drug users, but, even more important, how we might "cure" colleges and society.

As for counseling student drug users—potential and actual—I think it important to acknowledge that the question of drug use is, in the last analysis, not a medical issue, but an existential, philosophical and ethical issue. Student drug users are, as a group, extremely knowledgeable about the possible bad effects of drug use; they can usually teach their counselors, deans and advisors a good deal about the potential bad side effects of drugs. They will argue—with considerable validity—that society does not prohibit the use of other psychoactive compounds (e.g., alcohol, tobacco) which in some ways are far more dangerous than many of the hallucinogens or amphetamines. In the last analysis, then, whether one chooses or not to use drugs in full consciousness of their possible bad effects and the legal implications of drug use, becomes an existential rather than a medical decision. It is a matter of how one chooses to live one's life, how one hopes to seek experience, where and how one searches for meaning. To be sure, I doubt that we can hope to persuade students that drugs are ethically, humanly or existentially undesirable if they are not already persuaded. But I think we can at least help the student confront the fact that in using drugs he is making a statement about how he wants to live his life. And we can, perhaps, in our own lives and by our own examples, suggest that moral courage, a critical awareness of the defects of our society, a capacity for intense experience and the ability to relate genuinely to other people are not the exclusive possessions of drug-users.

In the long run, those of us who are critical of student drug abuse must demonstrate to our students that there are better and more lasting ways to experience the fullness, the depth, the variety and the richness of life than that of ingesting psychoactive chemicals. Consciousness-expansion seems to me not the sole prerogative of psychoactive compounds, but of education in its fullest sense.

Thus, insofar as we can truly and honestly help our students to become educated in the fullest sense, we will be able to provide alternative routes to the pursuit of meaning, the quest for experience, and the expansion of consciousness. Obviously, much of what passes for education in America fails to accomplish any of these high objectives. As long as it continues to fail, I suspect that drugs will continue to be a problem on our campuses and in our society.

DRUGS AND PERSONAL VALUES

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I am here to talk about values and drug use. For myself, I cannot divorce the notion of values from the business of motives and of the social and historical context. Let me start by making an observation. It is simply that drug use today is in many ways not different from drug use not only yesterday but two or three thousand years ago. The motives associated with the use of drugs occur again and again. In this regard I suggest that in traditional societies the introduction of drug use has been associated with two radically different kinds of goals, or if you will, values; that is, for religious or medical purposes.

The religious orientation has essentially been an expanding one. It proposes that there is something more in this world than the ordinary self and that the person can have access to that greater power. The person with this orientation uses drugs because he desires to experience that power, to get close to it, to know what it is. It may be an ecstatic supplement in the sense that one has experiences ordinarily denied. One has an orgy or a delight or a spasm of joy, whatever you want to call it, or it may be a profound mystical experience or simply a sensitive and beautiful feeling.

The other theme, the medical theme, has been that of healing or pain killing. It does not seek to supplement ordinary life but rather to bring the person back to where he once was or to put him in a position where he can function adequately. Traditionally the use of psychoactive drugs has been for the relief of pain and anxiety. These, the tranquilizers as well as the narcotics, comprise the largest category of drugs used medically.

Studies of Student Drug Use

We were involved in some pilot studies of normal population drug use. To me a critical question is what do ordinary people do? What is the norm? What happens? What is the convention in our society with reference to the use of drugs? When I say drugs I mean psychoactive drugs, those drugs which alter mind and mood and cycles of sleep and wakefulness. Having done this other work, we have been involved in the last year in the studies of student drug use.

Let me share with you some of the troubles we run into when we are trying to assess student drug use. The drugs in our college studies have covered quite a broad range. We have been interested in the stimulants, the mild ones and the strong ones, in the analgesics and the opiates, in tranquilizers both mild and strong, in the psychoenergizers or anti-depressants, in the hallucinogens (which, by the way, rarely cause hallucinations), and we have been interested in the intoxicants. In addition, we can't help but be interested in tobacco since that

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is a very common addicting drug if we dare to use the word "addiction."

A second problem is getting adequate data once we know what drugs we care about. People often don't know what they have been taking. Certainly, over their lifetime they would be unlikely to know their exact history of drug use. Even if people do know at least some of the substances they have been taking, they may not be willing to tell you about it. So we can get under-reporting when we ask some students about what they really did yesterday or what it is they plan to do tomorrow.

Another problem which you may run into on your own home grounds, is access to institutions. For instance, we are trying to study high school drug use, yet it will be a cold day in hell when they let us in any high school to do our study—and for a lot of good reasons such as the fears of the board of education, the newspapers, and the community.

Another problem we have, which is a technical one but which really interferes with much discussion, has to do with the definition of "use." "He is a pothead. He is a user," meaning that a student when 19, did one evening, in company with others, illegally acquire and illegally possess marihuana and further did take three puffs of a "joint." That can be one definition of a drug user. Or again, "Yes, he is a real LSD user," which might mean that a student took LSD once two years ago and wouldn't touch it now for love or money. So when we talk about use we have to be careful to specify what kind of use.

As we approach our college populations we are well advised to discriminate between those who have used an illicit or exotic drug in an exploratory fashion, and those who are committed users, the people whose lives are built around drug use.

Now, assuming that we have found out what is happening on the campuses with regard to drug use, let us consider some of the premises upon which we are beginning to operate, one of which is that students in some colleges are using more drugs without medical supervision.

Our concern then is over the social use of drugs, in particular the exotic and illicit drugs, not alcohol or tobacco even though those are potentially dangerous indeed. From an epidemiological standpoint one should also ask, "Are students using more drugs in approved ways as well?" That is, are alcohol and tobacco more used than five years ago, or are medically prescribed drugs being used more often as well? One suspects that with increasing medical care and with the increasing reliance of physicians on pharmacotherapies that there may also be a simultaneous growth in the medical as well as the nonmedical employment of these substances.

Another premise that brings us together with a shared concern is that there are ill effects which are associated with drug use.

Another thing that many of us assume is that what is bad about drug use is not just a matter of physiological or psychological ill effects but, rather, that it is part of an unsettling social package. One sees illicit use occuring in association with other social trends in student behavior, trends not approved by some of us, trends which can jostle or shake us up a bit. In may be that the entire pattern of conduct "bugs" us and that student drug use is something on which we can focus our worries. Implicit in that worry may be our awareness that there are changes in values and standards that go beyond beards and sandals, changes that reflect fundamental challenges to social codes which adults hold and which the elders think students also ought to hold. Here we are asking ourselves, what is acceptable conduct? What is an acceptable goal in life? What are acceptable means to those goals?

Unquestionably, student use of exotic drugs in any regular way does itself challenge conduct standards that many thought were pretty stable, standards one thought were going to stay with us for awhile.

Characteristics of Student Drug Users

In assuming that drug use is increasing among students to an unknown point, it is less and less easy to make generalizations about the characteristics of users; more different kinds of people are involved. In the old days, two years ago perhaps, one could propose that people smoke pot because they are rebellious characters, thumbing their noses at the system and trying dangerous behavior. That was all very fine to say as long as pot smoking was highly disapproved and had to be rebellious. But now when you have campuses where "X" number of kids are using pot and it is the thing to do, the student would be ashamed if he did not. It would be foolish to assume that one particular kind of personality or attitude or social background is associated with what is now popular experimental behavior. That is to say on some campuses anyone can be expected at least to try marihuana regardless of whether he continues with that behavior later.

We already have diversity in student conduct and we shall get increasing diversity. As we all know, the kinds of people who are going to be innovators and those who are going to be followers are likely to be different from one another in many ways. So it is we must not lump the motives and personalities of student drug users in one common category. Diversity there will also be the rule.

A problem rarely mentioned and which we must call attention to when we accept our premise of expanding drug use, is the role of physicians in contributing to the expanded use. From our pilot survey we have some evidence that the people who became exotic drug users, and this tends to be a well-educated young sample in a normal population, had larger exposure to medical care. Their parents had been more interested in giving them drugs, they had been taken to the doctor more often when they were kids, and they learned to take drugs. They had become drug optimists, if you will, and I suspect many of us are drug optimists. We give a great vote of confidence to the pharmaceutical industry and to modern medicine. So we should not overlook the role of the physician as an instructor in drug use. We believe we can control our insides with these little capsules. It is a very simple belief—yet its ramifications are immense. How could we expect our children not to take drugs if this is what we have taught them?

Consequence of Student Drug Use

Things I worry about and I gather that you worry about are dependency, or addiction as it is sometimes called, crime, immorality, traffic accidents, psychosis, suicide, illness, some kind of tissue or metabolic change either acute or chronic, personality changes of an undesirable sort, or an undesirable shift in social conduct or values. One might also include the embarrassment, pain and tragedy of arrest for the individual and the embarrassment for his family and institution.

We must be cautious before leaping into the fray with warnings to kids about what is going to happen if they use such and such. Usually we do not really know. The whole problem of assessing risk has to be related to different kinds of people using a drug dosage, kinds of circumstances, and so forth. Then, if we knew all of that, we could say, "Okay, Jack, if you take this drug in this way, here are the probabilities of it going sour." Given the absence of facts and given also our common sense that these powerful agents can do damage, one of the most important things to be aware of, it seems to me, is the sense of alarm which outweighs the evidence at hand. The public assigns very peculiar priorities to their worries about drugs and the most peculiar priority is to put heroin at the top of the list. There are very few college students who will ever take it, and there are fewer who would become dependent if they did.

Counter Action

Considering public alarm over student drug use, we cannot help but face the special risk that is generated by public anxiety itself. That is the risk of our being forced to be premature in our actions. We are all in a spot. The danger is that we will act impulsively when the parents call and say 'What are you doing? What kind of a university is that? I heard there is marihuana on the campus. Stamp it out!' The alarm is a demand upon us, yet we should be very cautious not to let emotion drive us into corners.

We talk about risks, but let us not forget that most of the psychoactive drugs employed these days are used because of benefits. We use barbiturates to go to sleep, we use tranquilizers to reduce agitation in hospital wards. We use aspirin to get rid of headaches, we use alcohol for pleasure. Let us not overlook the fact that there are benefits associated with use. If not, there would probably be very few users and neither a pharmaceutical nor a liquor industry. And so it is that people enjoy marihuana and they enjoy LSD.

What we must do is to balance the benefits against the dangers, but in alarm let us not speak as though we were unaware of the reasons for the being of these substances. Of course, we should also not forget that some of the benefits are a placebo effect.

Summary and Recommendations

In summary, we believe that exotic drug use is increasing, and we know that risks as well as felt benefits are there. We care enough about our students to want to reduce any dangers they face, yet we hesitate to restrict their freedoms and indeed, we may be unable to restrain their conduct by administrative action. The question of the efficacy of disciplinary, punitive or controlling actions as a means of influencing drug use goes beyond the consideration of student conduct, extending to the current state and federal laws as well. Although I think one can show an influence of the criminal law on the supply and distribution of drugs and quite possibly on decisions initially to use or not to use a drug, I am dubious if the punishment-control method makes much of a dent upon the convinced or committed user group. If that is the case, it would mean that we do not lose much by reluctance or inabiilty to apply sanctions against drug use.

I think the course best open to us in dealing with student drug use is that to which we are—in conjunction with our students—all dedicated. That is education. We are all educators and we must have great hopes for knowledge as a means of guiding lives or we would not be in the business. Why not then remain consistent to our calling and to our beliefs and emphasize fact-finding and information-giving as means to acquaint students with the significance and effects of exotic drug use? We can also be aiming, as we do in much of education for civilization, at the development by students themselves of group norms and inner standards which sensibly guide their conduct.

I further suggest that educational efforts not be limited to students alone, but directed at the drug gatekeepers. Here I mean physicians, parents, pharmacologists in our laboratories, our campus professors and the graduate students. I suspect we shall find that with each new socially used drug these people will be the channels for learning attitudes, use, and sources of supply. If we want to have an impact we must talk to those who are models, those who are the opinion leaders for them—and that is as it must be—for education is a business of exchange, a dialogue, not a one-way street.

MOTIVATIONS FOR STUDENT DRUG USE

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In traditional societies one finds the simultaneous use of drugs for healing and religious ends. In such societies one also finds, but more rarely, a third orientation associated with the individual use of drugs. Here the drug is associated with a decrease in the individual's ability to function and in his capacity for both work and experience, as seen in the disabled drug user. Such inadequacy is sometimes disguised behind a philosophy of drug enjoyment or a commitment to a drug-using group. I do not think we should overlook this function in those who use drugs ostensibly for other purposes. It may well be that people want to withdraw.

But in looking at the secular use of drugs, which is what we are concerned with in their non-medical use on the campus, we must be cautious and not become overly psychological in attributing reasons to drug users. The substances being used are all social drugs. They are part of the social scene. They are part of what people do together. Anybody who smokes a cigarette in a conversation or who takes a drink with others knows this. Thus when we talk about newly popular drugs, like LSD or marihuana, we must note that some of the reasons for their adoption have to do, in part, with their function in sociability. The diffusion of drugs must be examined as a social exchange and as a learning phenomenon.

Some aspects of drug diffusion seem fairly consistent from campus to campus and are even consistent over the last few thousand years. For example, young people usually learn to take drugs from people who are older. Females tend to take them from males. People with higher status give them to people of lower status. Leaders distribute them to followers.

Given such patterns, it is hard to infer a single set of values or motives in the diffusion of drugs on campuses. Indeed as drug use becomes common among students, one can say that a sophomore is exhibiting normal social behavior in taking marihuana for the first time from a senior. Normal of course by no means implies that it is wise.

Another important feature which we find in the study of committed drug users, as opposed to people who are merely experimenting, is that the reasons for continuing to take the drug are frequently different from the reasons for starting it. For example, one starts to smoke because one's friends and parents smoke, because it is the thing to do, or because one is sociable or curious about smoking. But the cigarette can become very personal. One gets to need the cigarette. Those of you who have become cigarette addicts are aware that the present desire to stave off withdrawal symptoms, to stay content, to suppress tension, or just to have something to do

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with your hands, is quite different from the original exploration and sociability that led you to smoke your first cigarette.

Perhaps we can examine the functions of drug use. What does it do for the guy? How does he act? What seems to be happening? What does his group do and what impact does it have on the social system of which it is a part? Then at the same time we are free to ask the previous questions: What is it that the drug user says he believes, says is his motivation for use? We can compare his actions with his statements and test them for consistency—and as part of this analysis watch our own counter-reactions to his behavior and statements, since our own reactions may very well be part of the system which underlies that which is happening among student drug users.

I suggest that one of the fundamental orientations which might be used to discriminate those who continue to use drugs (LSD in particular but marihuana and some of the others too) from those who reject their use is an inside versus outside orientation. Introversion and extraversion are terms for what we are dealing with here. In interviews with and observations of drug-using people, one senses an emphasis on the value of what is going on inside their heads, on looking at it, and on the importance of internal experience. But among non-users, I think there is more interest in external experience, in what is going on between people, with an emphasis on looking for explanations and for directions and solutions on the outside. In our LSD study this seemed very clear.

As alternate terms for inner-outer or for introversion-extraversion, one can say egocentric versus other-centered, selfish versus sociable, or profound, sensitive and esthetic versus materialistic and shallow. The terms you use depend on what system you buy and how you feel about it. In this initial concentration on the inner orientation, let us assume for a moment that there may be some worth to this category of experience. What are the satisfactions or values associated with an emphasis on internal experience? The kind we had better consider first—which I think are rather important—are essentially psychopathological functions.

Psychopathology of Drug Use

Some people hurt themselves or others and can be said to be screwed-up characters. If we will accept this for the moment as a definition of "psychopathology," I suggest that some proportion of drug users, students and others, are fouled-up people. The drug serves them not in an unscrewing function but perhaps in a pain-reducing function. When a doctor ponders when to give morphine he weighs the utility of the drug in terms of its capability to reduce pain. In the case of a disturbed student's pondering when to self-medicate with a social drug, he may also weigh its utility for pain-reduction. His value or aim is, "I don't want to hurt." He is not pursuing pleasure; he may merely hurt less than usual when on drugs.

A student I know is a very capable and sweet guy. He is also a rather heavy user. He uses it, he tells me—and I have also watched him—whenever he is going to be with a group, because he gets nervous and tense otherwise. A little LSD or marihuana calms him down and allows him to function. Others of us might take scotch or cigarettes but LSD does that for him. Such psychopathology as his is minor, but without much looking we can see serious illness among some drug users. Another important way of using drugs has to do with the partial resolution of some of the difficulties of growing up. Many human beings are stuck with psychosexual complexes. A guy or a girl during college years can be exposed to all kinds of relationships and impulses which do not get handled as he would like. By using drugs he can sometimes succeed in reducing not only the anxiety but also the desire. An example, it is a curious thing that there is among the users of the mind-altering substances a lot of talk about "making out," about sex and free love—but damned little activity. I think that the function of the drug in reducing sexuality cannot be ignored. It is not that sex is no longer important but rather that the student can accept a new value, one which says, "It is all right to be nonsexual and to concentrate on other things." That may or may not be a neurotic solution.

Another pathologically relevant use of drugs has to do with the reduction of intimacy in human relationships. In this society you cannot get away with that without lying. We are supposed to like each other. The acceptable thing is to go out and mix and be a good guy, get along, be affectionate or at least smooth, to love a lot or a little—but above all to seek and be with others. The use of drugs may remove people from intimacy and may do it in a way which can be lied about very easily, because they say, "I am becoming more intimate. I am feeling loved. I am a lovely guy. You are a lovely guy. We are lovely together." Saying that, they crawl back into their shells where they do not

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have to look at one another again. One achieves this "lovingly" and has not hurt anyone and has learned a new value system to justify one's pathology. I watch it often. I believe it to be there. If it is, I will be delighted; if it is not, I will not be surprised.

Interpersonal Pathology

All drug use certainly cannot be conceived in terms of individual pathology, nor can all use be explained simply in terms of private feelings, or neurotic or even psychotic idiosyncrasies. We therefore have to deal with interpersonal pathology, the nasty things people do to one another with or without excuse. Drugs do not produce any special new nastiness in human beings. We are all capable of all kinds of misbehavior without taking any drug. One of the great dangers, one of the great nonsenses in criminology and other fields is to blame bad behavior on drugs. You will hear someone say, "He took heroin and became a bad boy." The fact is that if he is bad boy and takes heroin, he remains a bad boy and is going to stay a bad boy until something else—not heroin—happens. That he treats people badly can be accounted for not in terms of drug use but in terms of how others have treated him. Thus much psychopathology is really an interpersonal phenomenon. Much behavior under drugs is nasty, take the aggressive drunk for example, and we dare not ignore it. But the chances are that it is the person and the situation, not the drug, which are accountable. The drug just changes the emphasis.

Another thing that happens in drug use—it is not pathological but human and does not bode well for society—is the ethnocentrism one sees in the development of drug-using groups. As in any other social group, an emphasis can be placed, call it tribal or fraternal, on valuing the insider and on denigrating or rejecting the outsider. In studying the way-out drug users one just cannot miss this characteristic. It hits you in the face and does not make for good conversation or pleasant relationships. For the in-group fellows a drug can become a symbol of group-belongingness and worth. That in-group feeling is accentuated simply by the realities of illicit drug use, which require a pseudodelinquent tie and a wariness about the punishment potential existing in the square out-group society. After a group has clustered about a supply source it can develop defensive justifications which say, "Wonderful, a fine bunch of people we are, but those who want to cut off our drug supply or to punish us are very bad fellows indeed."

Religion and Mystique

Now let us look at some other aspects of use. We must not ignore the religious and mystical functions which students attribute to drugs and the religious and mystical experiences which they say they had under drugs. Nobody knows really what goes on inside anybody's else's head, not even with the aid of an EEG machine. When something new happens in our heads, as in a drug reaction, one has to interpret it. That interpretation can be helped by teaching. There is no doubt that drug users tend to teach each other what is going on inside the head. Somebody joins a group of kids and whether by accident or propensity, he likes them. They say to him, "We use marihuana or LSD and we are having a religious experience." They give him the drug in a setting where his experience is formulated as a religious one and he believes that is what happened. On the other hand, when one's brain is turned off by a response to toxic drugs one has to substitute something else, something to lean on and to interpret the world with. At that moment of organic anxiety, it is critically important for somebody to come in with supports, with a belief system to replace that which disappeared when the complicated circuits were shorted out.

I will run through a list of other things that I think are relevant to the use of drugs by students, and which we can see have belief systems built around them. One aspect is the disillusionment, the unhappy response of disillusionment with a harsh life and an unkind society that comes one day to all young people. Living anywhere is hard work. Living in a competitive society is hard work and often not much fun. It is very nice to find a way out through the back door or any other door we can find. A new system of values which promises a way out will be attractive. Some of the drug culture mechanisms allow one a private way out while maintaining a public facade of accommodation, for it does not go all the way out, just part of the way out.

Another function of the drug we see expressed is a creative and esthetic one. Drug use is equated with beauty and sensitivity. Some quite competent artists feel a debt to LSD or pot for freeing them or for helping them to be creative. These are the reports of their personal experience. When competent artists say that, we must respect their beliefs even though we suspect they owe more credit to themselves and less to the drug.

Another aspect of drug use has to do with our much-vaunted rationality. I think students are tired of rationality and things associated with it—foresight, control, discipline, the Protestant ethic bit, grace gained only in later life—for they are hard to live with. To be irrational, to be allowed to have an ecstatic experience, even a mushy one, that is not so bad if one must live with the rational computer night and day, as these kids are beginning to have to do.

I might add that this is happening to some students while they watch their own parents, older friends, their teachers and deans, and say, "Is that going to be me? Help, I want out!" You may call that irrational until one day you also have had it and when that day comes you also look for the door that leads out.

Another set of notions I suspect may be associated with student drug use are those delightful feelings of invulnerability, the beautiful young belief that "Nothing can hurt me." Some have ways of proving it. "I climb mountains because I will not be killed mountain climbing, or I will drive ninety miles an hour because my car has a special charm." Drug use represents for some what a psychiatrist would call a counter-phobic response. For others, the invulnerable feeling results only because they had had a good life, well protected and pretty sweet, and they just never got the idea that something bad might happen.

Morality

Another drug-relevant element that I think is part of the "I am a beautiful child" syndrome is the notion that "I am basically a fabulous person, and if I don't feel that way at the moment I can become that way by just seeing further into my real self—the pure one uncontaminated by the adult cesspool world." That hope of being beautiful or complex is certainly understandable. It is a poetic desire, although others might call it vanity.

Another drug-relevant element which I think is part of the value-system, although I do not know how many people subscribe to it, is part of a new morality. The new morality prizes private experience, inner sensation. It values freedom, art, nonrestraint, pacificism, protection of life, and nonaggressiveness. The new morality is associated with anarchistic beliefs, expressed optimism, a feeling of separateness from the adult world, and not too much respect for the sacred cows of middle-aged folk. Of course, there can be irony in the new morality, as in the old. It values life and it values others, but an emphasis on inner experience can put the person in the position of not really being able to act in a way that can be of any help to another. The irony can be a feeling of private love unassociated with the capacity to love or to engage in a genuine community life.

Ironically too, one value that is rarely set forth is that of fun. A lot of people take a drug because it is fun, yet it is a curious fact that so few can admit to it. People employ ideologies to excuse their simple pleasures or to justify pain, when that occurs.

In the new morality may also be found the "cool rebellion." To use marihuana or LSD confronts colleges and parents with something that shocks the hell out of them. One cannot ignore the fact that there is shock and rebellion in what is done, but this is a rebellion conducted for the most part behind the privacy of one's own walls. Such rebellion, an undeclared war, if you will—and I do not mean to exaggerate its importance since we all go through rebellions—has the delightful capacity of letting one be a rebel without being identified as such, or letting one's most significant act occur in such a way that nobody can clobber the rebel for it.

A final aspect of student drug use is critically important. It can put us in an awkward position, for the university is a place where people are supposed to do new things. The university is an institution for innovation, a place where the old is supposed to be analyzed and challenged and where, when the old is not any good, one learns to throw it out. The university is a land of hope and promise. It demands experimentation. So it is that a university is a place to do experiments that fail and experiments that succeed. That value is one which the kids have learned and I think we are all glad they have. We cannot forget that out of ten experiments which they conduct—intellectually, socially, or personally—we are very lucky if they win on one, because in winning on one presumably all of us have gained a bit and benefited. Nevertheless, they are going to be losers on the other nine.

We hope to let them continue their experimentation and to be able to tell us to go to hell. At the same time we must try to warn them from what we know, if we know it, when a particular experiment might go sour in such a way that they are no longer able to conduct further social or personal experiments. Let us guide our drug programs by these lights.

THE MYTH OF ALIENATION AND TEEN-AGE DRUG USE: COMING OF AGE IN MASS SOCIETY

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The Concept of Alienation

The meaning of term alienation, as used here, is a state of rejecting the dominant culture and its institutions. Political activists, hippies, and compulsive drug users, in terms of this definition, are very likely to be alienated. Most high-school and college students who experiment with marihuana are not. The majority of them are qiute normal, probably superior, teen-agers.

Characteristics of Teen-age Drug Users

Consider briefly what the typical teen-age drug users are like.

They are white. They are upper-middle and middle-class. In a high school predominantly upper-middle class marihuana use (depending on the grade) varied from 16 to 31% for boys, and 12 to 28% for girls. In a lower-middle class high school, the boys' use was 6–12%, and the girls' use was 3–6%.

They are affluent. They tend to be humanitarian, and to value self-exploration. They are rarely "rebels" or "revolutionaries" against our society; they are intent (albeit often clumsily) upon expressing fulfilling values they have learned in the home. Their parents have emphasized the humanitarian goals of self-actualization, individuality, autonomous decision making, the value of self-expression, creativity, concern for others, and spontaneity.

Motives Behind Drug Use

Looking beyond the social myth which stereotypes young drug-users in terms of alienation and emotional disturbance, what motives do we see operating in their behavior which would cause them to view "tripping out" or "getting stoned" as desirable?

The curiosity drive is one good reason.

A second factor is that drugs are medicine. When asked to "explain" (i.e., justify) their behavior, teen-age drug users often point to the fact that commercial drug industries advertise continually the benefits of taking pills for every kind of physical or psychic discomfort, including such vague ills as "nervous tension." Young people realize that drugs can be abused but often feel that their parents' use of tranquilizers, barbiturates, amphetamine and alcohol is more irresponsible and dangerous than their own use of pot and LSD.

A third item is that drugs are fun. In the authors' interviews with teen-age users the most common response to the question of "Why?" was, "It's fun!" In spite of the Protestant Ethic, there has developed in America a pleasure-seeking ethos. With the help of alcohol and pep pills, parents are often pursuing fun themselves with the energy of the Furies. If we reject marihuana in the face of this hypocrisy, what

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sort of respect will we have left to draw on when a student starts using "acid," "speed" (amphetamine) and "smack" (heroin)? If a teacher is to oppose our fun-oriented ethos, he must have a thoroughly examined philosophical position from which to do so. How many of us can say this? And, if we do not oppose the right to have fun, on what grounds are so many of us judgmental and indignant about the use of marihuana by students?

Next comes sensuality. This is really a sub-category of "fun," but a very special one. We mentioned above that the senses of touch and taste have been very neglected in our culture. Therefore, the exploration of them provides a special fascination for young people. Almost every marihuana party, and many LSD trips, involve a period when everyone gets the "hungries" and explores as wide a variety of taste delights as is available. More crucial, however, is the increase in cutaneous sensitivity, because one aspect of this is sexual stimulation. Our inquiries have not revealed much interest in sex during LSD trips. There is no doubt, however, that teen-agers have discovered that pot makes the exploration of sex more delightful. As far as we can tell, this has not meant an increase in sexual exploitation or carelessness. The hippies, whom the mass media use to create this kind of impression, seem to have been emotionally disturbed and sexually rebellious before dropping out into the drug subculture.

The problem, it seems, is that teen-agers are more permissive about both drugs and sex than are older generations, so that it is easy to read into the situation a causal connection that is not necessarily there. This is a generational change that parents themselves have helped to create. Today, parents themselves, although sometimes unwilling to admit it, are more permissive about sex and sensuality than they were 20 years ago.

Many serious scholars believe that LSD does produce an experience similar to those described by the great mystics. Testimony to this effect has been made by Alan Watts, Allen Ginsberg, Dr. John Aiken, Huston Smith and William Stace, a Princeton professor, considered the foremost authority on mystical religion in the United States.

Adolescence at Mid-Century

The aspects of American culture which support the permissive use of drugs—the enjoyment of leisure, the desire for self-development, and the curiosity about the nature of the inner self—have been accentuated by the conditions under which the current generation of teen-agers have been raised.

The most dramatic revolution of the past 25 years is the emergence of an advanced information technology creating new concepts in space, time, and human relationships. Today's students are the first generation to be raised on TV, cinemascope, stereo sound, and transistor radios. As Marshall McLuhan has described, the electrified mass media give us instant communication; messages race to bombard our senses from everywhere. Thriving on the information explosion, youth create happenings, environmental art which amplifies the simultaneous stimulation of all the senses.

Next in importance is the increasing automation and cybernation of work and education. Our youth have not only observed technology streamline their schools and their fathers' jobs; they have now come to expect as a matter of course vast changes in their work and leisure situations. This is the first generation to be prepared psychologically for a science-fiction future.

Another crucial influence is the birth-control pill, a piece of technology that creates new attitudes and expectations about sexuality in teen-agers. Again, this is the first generation to grow up with the knowledge that virtually 100% effective birth control is available.

The H-Bomb is yet another influence shaping the world view of today's youth. An unprecedented familiarity with world events and the obvious failure of our society to deal with the H-Bomb and other world crises have produced disillusionment among the youth.

A final condition that must be considered is the wealth, the leisure and the indulgence available to children in this same period.

The next thing to consider is what kind of teen-age subculture will be created by these conditions.

Negative Aspects of Teen-age Subculture

Irreverence toward the past. Young people today tend to ignore tradition and have no heroes and are ignorant of past social movements similar to those they start themselves. It never occurs to them that anybody in the past has tried to form a utopia, formed a commune, discussed the value of freer sensuality, thought of having a companion before marriage, or started a peace movement.

The old judgmental-conformity aspect of teen-age subculture still seems to be with us. At some high schools there is a lot of pressure among teen-agers to use drugs; those who are not prepared emotionally may be pressured into using them.

Like their elders, they are leisure and consumption-oriented. This showed very prominently in the Haight-Ashbury during the "Summer of Love." The older hippies were concerned about developing a creative community around the concept of doing your own thing, the thing being some kind of work in which you contributed to the community.

What happened when 10,000 teeny-boppers and college students rolled into the Haight-Ashbury? Doing their thing, for them, meant to consume; and they consumed everything in sight—they ate all the Diggers' food; they wore all the Diggers' clothes; they took in all the free concerts they could get; and they wandered around, picking and chomping the flowers in Golden Gate Park. By the end of the summer, the Haight-Ashbury was a community drained of its resources.

Positive Aspects of Teen-age Subculture

Among youth today there is an awareness of hypocritical use of tradition. The upper-middle class teen-age leaders, especially, see most of the hallowed traditions of this country as delusions. They have begun to recognize, through their growing interest in Eastern mysticism—their awareness of the concept of "maya" which translates best as "social illusion"—that ideals of this kind are nothing but verbal traditions, made-up games. And the question is: is the game worth the candle? They are beginning to look at the game and the candle, and will not docilely accept the hallowed traditions. The current peace movement demonstrates that one of these questioned hallowed traditions is the idea that you should be willing to die for your country without questioning the moral value of the war.

They are espousing a number of primitive Christian precepts, which find their epitome of expression in the more responsible, older hippie community—that is, the hippie community organized around a concern with mystical experience, and the community of love.

Young people are naive about the world because they have been "ghettoized" in suburbia. Upon going out into the larger community, they are shocked by the hypocrisy of their elders.

The fourth positive trait is romanticism. Young people have begun to look for a kind of tribal identity, and may come to look on their peer group as a tribe. This has always been characteristic of teenagers, but now there seems to be a kind of nostalgia developing among youth for the simple life exemplified by the American Indian and the frontier community.

Another part of youth's romanticism is its anti-technological bias. These are the children that have been put through the IBM machine routine ever since they arrived for kindergarten. They have gone to huge bureaucratic schools, high schools, colleges and universities. They are getting sick of anonymity and lack of personal attention.

A part of romanticism is the great suspicion of society's "ego games." Again and again we have heard young people attack viciously the kinds of games their parents play in business, in marriage, in social climbing, and so on. They are still quite naive, and they are not aware of the games they, themselves, play—with their elders, themselves, or each other. But at least there is an increasing awareness that most of our interacting is based on games and facades, and maybe this will lead someone in some distance future to create a culture free of games of exploitation and manipulation.

The next characteristic involves what the anthropologist Gregory Bateson called the cultural ethos—the psychological orientation of youth subculture. There are five of them and they are briefly:

An awareness of others. Young people today dislike "ego trips." Marihuana makes you quiet, amenable, sociable; alcohol makes you obnoxious, noisy and aggressive. Young people value a kind of "empathy" which they consider subtle but realistic. They want to see the real person behind the role, and they talk in their lingo about "auras" and "vibrations." Some identify "vibrations" as spiritual perceptions, but they may legitimately involve some sort of sensitivity to subliminal perception—or just projection.

They value self-actualization. This value seems to reach its epitome among young drug users and in the hippie community. One of the corollaries of this value is that society—and particularly its school system—should not interfere with the exploration of new experience. In fact, like the permissive and indulgent families they have come from, young people feel society should provide the space, the time, and the tools necessary for this. When they find that instead, the bureaucracy interferes with exploration and self-actualization, with the creative working out of their own individual and unique patterns, they become indignant.

A fourth aspect of the new ethos is the permissiveness toward sensuality. Parents following child guidance concepts of the 1950's, began to feel guilty about making their children feel repressed. They worried that Freudian theory might be right, even though they were still pretty inhibited themselves. Along with this reduction in repression, our students probably got more cutaneous stimulation during nursing, and during infant care in general, than previous generations.

Fifth, they have certain dislike for what they call hang-ups. They seem to want to remain more flexible than their elders. They do not like rigidity, and do not want to be identified with a role.

Drugs and the Social Reaction

With this picture of modern American youth subculture, perhaps we can better understand the current interest of the young in exploring the use marihuana, LSD, and other psychedelic drugs. It is our thesis that drugs that increase sensitivity and awareness were bound to appeal to young people involved in the kind of cultural milieu just described. Young people who value self-exploration, sensuality, sharing, tenderness, who want to be sensitive while they see their parents hung-up in self-delusion and exploitive games, and who are skeptical of their elders' competence while they want to create a better world, are going to value increased sensitivity above the nerve-deadening effect of alcohol.

Older people see marihuana as having all sorts of evil potential and peculiar effects, while they themselves are popping down prescription pills. Young people, being more aware of the recent literature and having read some of the scientific studies on marihuana, know that the old Narcotics Bureau description of it is absurd. When the police department's public relations officer comes to talk to school classes, and tells them marihuana is a narcotic and a very dangerous drug, they simply tune out.

Unfortunately, when he also tells them that heroin is dangerous, or that methamphetamine is dangerous, a certain number believe that they are being fed the same old baloney and proceed to experiment with these dangerous drugs.

When we raise the question of the cause of the alienation of young drug users and how we can combat it, the question may be completely off base. The alienation, to the extent that it occurs at all, is largely a function of the social reaction to drug use. Teachers and parents refuse to communicate with the young about the problem, and to recognize the fact that many students regard smoking marihuana as a normal kind of social activity which is not dangerous to their health or their morals.

If we are going to handle this problem adequately, teachers, counselors and school nurses must learn to overcome their fear of intimacy with their students and begin to communicate with them. Edgar Friedenberg, in his study of a Midwestern high school, *The Vanishing Adolescent,* found that most of the teachers were afraid of intimate relationships with their students. Most of them, he felt, were motivated by a fear that their aura of authority would be undermined. He found the students were bitter about the absence of any nitty-gritty discussions of life's real problems. Most of them regarded the high school program as "irrelevant" to their lives, and remained only to obtain the "certificate" passport to jobs and college. This problem, frankly, rather than any inherent quality of the drugs, is the reason that academic motivation drops precipitously with the excessive use of marihuana.

Whatever the reason, the fact is that most teachers are afraid to get involved in discussing their students' real, personal problems. Such discussions are emotionally strenuous and most teachers are already overworked.

Yet, if we are to give our young people the ability to face the real world, and if we are to break the vicious circle of the self-fulfilling prophecy in drug abuse, we must learn to confront our students honestly. We must learn the scientific facts about the drugs so we can confront them with meaningful evidence rather than outworn prejudice. With this combination of courage and information, a meaningful dialogue between young people and their teachers and parents can begin. The process of legal suppression can never be a substitute for this dialogue.

PREDISPOSITION TO ALCOHOLISM

Reverend Stanley T. Helm, Mendocino State Hospital, Talmage, California

One of the problems of the great emphasis on drugs in our society today is that we forget that alcohol is a drug. We get things out of perspective by over-emphasizing the problems of drug use (which are very critical) but, much to our relief, are able to forget the problems of alcohol which are a hundred more times critical in our society. It may not always be that way, if present trends continue, but it is now.

The approach that we now use is a behavioral and social approach rather than thinking of alcohol as a disease. There was a time when that was a fairly useful concept because it did break down some of the stigma after being labeled an alcoholic. That is a large part of the problem, by the way, the labeling process. I suspect that applies to drug addiction as well as to mental illness.

The general estimate of alcoholics now in our society is four and one half to five percent of all the adult citizens in the country. The proportion of male to female alcoholics is decreasing. It is probably around four and one half to one. It used to be higher than that. There are multiple causes, just as there are in the field of mental illness. We have to look at alcoholism as we do other types of behavioral difficulties as part of a long process. It generally takes a fairly long time of fair quantities of drinking to get into trouble. Some 75 percent of our population of adults are said to be users of alcoholic beverages now. There are a number of human differences in the reaction to taking any kind of substance. This goes for drugs of all types. Many of these are probably questions of heredity or biochemical make-up, or social-cultural development, demands and expectations that are ours by reason of our existence in a particular culture.

In our own studies, we took a sample of 200 patients. We now have a report on that group of people based on their own reports about their childhood, family life and other factors. Their major problem in growing up, they said, was due to either economic problems or parental incompatibility. Very few of them said alcohol was a problem in their family life, even if their parents drank. In general, they present themselves as having a happy kind of childhood and existence. According to them, their families, brothers and sisters, and teachers liked them. They were fairly good students, remembered school in a pleasant way, felt they were happy-go-lucky children. They went to Sunday School regularly without too much pressure and they report this kind of experience in their background. That leads us to believe they were afraid of hostilities and extremely sensitive to approval or disapproval. Some of them may drink to lessen that intensity and that kind of feeling. Our group surprised us because they used a wide range of drugs other than alcohol. They may go from one type of

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Excerpted from remarks to participants of a Marin County, California leadership training program in drug abuse education, June 1968.

drug to another. Most of them stay with a sedative type of drug, not the stimulant types.

This project had led us to believe what we have felt from the beginning that the emphasis on alcohol and alcoholism is a somewhat misleading one, just as the use and misuse of drugs is misleading in a sense. The emphasis must be on people and their problems and conflicts and difficulties. The use and misuse of whatever it is is somehow an attribute of that particular underlying difficulty. When we used LSD here in a research project, we found that under the LSD experience only two of our patients reported thinking or images about alcohol. What they did report were other types of conflict with people or feelings or particular situations in their backgrounds with which they were in conflict.

We tried to differentiate the kinds of personalities we see most often. Men are in more difficulty than women because of their drinking. They are "in thicker" than women. They have suffered more loss. They have fewer social resources. They have more conflict and they have more difficulty in achieving a different kind of life. Women have more normal kinds of personality patterns; they are in less psychic difficulty generally speaking. That is obviously not true for everybody, but it is generally true.

Most alcoholics we see have little tolerance for frustration. They have difficulty in coping with stress or withstanding anxiety. Emotional tension and conflict are present—in family relationships especially. There are strong feelings of alienation from their community or their family or, frequently, they have high energy levels but poor impulse control.

There are some unique problems that arise for women, as we have seen in our own study group of women alcoholics. Some of these are: how do you assert yourself without alienating men? What is a feminine person in such a world as this? How can you recognize your dependency needs and realistically meet them without being dominated excessively or without being unhappy about it? How can you accept the fact that you are feminine? How can you achieve depth in interpersonal relationships? How can you reduce anxiety by non-destructive methods? How can you find relief from guilt without depression or despair? How can you achieve less sensitivity to the feelings or expectations of other people, to be tougher in some degree? How can you achieve a personal sense of security without undue reliance on others? How can you lessen the need to control others by devious and various means? How can you express hostility toward others without self-destruction or guilt or alienation? Those again are not unique questions only of alcoholics, but they are questions to alcoholics as well as to others in our society.

In approaching the field of alcoholism we adopt an attitude that is consistent, open, non-critical and non-punitive. If punitiveness helped, everyone would have been helped a long time ago, because they have certainly had plenty. So the basic approach to this particular type of problem is not permissiveness, but simply non-punitiveness. One of the basic problems of all alcoholics in our society is that doors have been shut to them and the normal things that would have been open to them have been unavailable. You go to an out-patient clinic dealing with mental problems and let them find out that you are an alcoholic or drug user and see how far you get in their set-up. You find that you are out on the street again. If these and other doors were open, it would be a lot less difficult for alcohol and drug abusers, and for society.

GLUE-SNIFFING: A REHABILITATION APPROACH

Judge Theodore Rubin, Denver, Colorado Juvenile Court and Robert C. Hanson, Ph.D., Department of Sociology, University of Colorado

Problem

The inhalation of airplane cement fumes for the purpose of intoxication occurs among adolescent boys and girls throughout urban areas and at all class levels in American society. Habituated users of glue began coming to the attention of the courts, schools, and other civic agencies in the late 1950s. In Denver, about nine out of ten cases were boys who lived in slum-like, deteriorating neighborhoods. Over 90 per cent of known users were Spanish-American boys, usually from large, multi-problem families. The boys were frequently truant from school, had failed one or more years, and were likely to fail again.

Theory

Chronic intoxication through the habitual use of glue is a possible adolescent response to continual frustration produced by family disorganization and school failure. Normal socialization processes which typically produce conformity to the norms of the larger society are disrupted for children from unstable homes with language and values different from those of Anglo middle-class society. A potential glue sniffer, hampered in his psychological and social development by repeated frustration at home and school, and exposed to deviant patterns of behavior in both home and neighborhood, is likely to depend on neighborhood peer group relations in his search for recognition and affection. If a neighborhood peer group engages in glue sniffing then the adolescent who joins the group will be exposed to glue-sniffing behavior. Should he wish to remain in the group, social control pressure from higher status members will require him to learn the glue-sniffing activity. He will then be labeled a glue sniffer by society, which leads to the expectation that he will continue to sniff glue until the group breaks up or until it changes its pattern of activities.

Alternative Rehabilitative Approaches

The theory just presented suggests an obvious rehabilitation prescription: restructure the social relationship and the socialization experiences of the glue sniffer in the home, at school, and among neighborhood peers. The objectives of such restructuring should be to help the glue sniffer develop a more favorable self-concept and a pattern of coping behavior to deal with current frustrations without resorting to glue sniffing as an escape, and to change his attitudes and actions from his current acceptance of and engagement in delinquent behavior, preferably by changing the structure and activity patterns of his neighborhood friendship group.

In contrast to a control group of glue sniffers who were assigned to court probation counselors in the traditional manner, three experimental groups of glue sniffers were set up to test the relative effectiveness of alternative rehabilitation approaches.

Group I consisted of a natural friendship group in a deteriorating Spanish-American neighborhood. All eleven members of the original group were known to the Court as delinquents and heavy glue sniffers. A regular court probation counselor was assigned to work full-time in the neighborhood in an attempt to change the attitudes and behavior of the group as a whole. In addition, members of this group were assigned a special teacher in their junior high school from whom they received instruction and individual counseling as a regular class three hours each day. Both court and teacher counselors were guided in the group approach by an experienced group techniques consultant. Both counselors established relations with and received cooperation from the parents.

Group II was originally composed of a natural group of seven neighborhood friends from a different run-down Spanish-American neighborhood. With one exception, these boys were not known to the Court, and, while glue sniffing was obviously occurring in the neighborhood, original members were reluctant to admit that they used glue habitually. The group was counseled by a young Spanish-American college graduate. Over time, he established good relationships with the parents of the boys. He also received guidance in the group approach from the Project's group techniques consultant. As in Group I, the primary objective was to effect changes in delinquent attitudes and behavior by changing relationships and experiences of the group as a whole. This "local leader group" did not have the advantage of special help in the school system.

The primary effort in a third experimental group was devoted to intensive individual therapeutic work with 13 known delinquent glue sniffers and their parents. The counselor was a young college graduate with a social science background. He was guided in his therapeutic efforts by an experienced casework consultant. In this approach, nothing could be done to affect the attitudes and behavior of the glue sniffer's neighborhood friends. Help with school problems was given on an individual basis.

Finally, in the Control Group, only the brief face-to-face interviews with a court probation counselor could count as atempts to effectively manipulate the socialization experience of known glue sniffers.

Results

A series of behavioral, attitudinal, and psychological tests were administered to the original members of all four groups. Approximately one year later, the same tests were administered to the current members of all groups. Court and school data provided additional objective measures of behavioral changes. Since group membership changed over time due to residence changes, increases due to new glue sniffers in the neighborhood, absences during the period the tests were given, and so on, complete data on each original case was impossible to obtain. The results therefore were restricted to those cases in each group for which test results were available at both measurement periods. For each test, change in a "favorable" direction was defined. For each group the average amount of favorable or unfavorable change was computed.

A Change Trend Summary table shows that the School Dynamic Group (Group I) changed in a favorable direction on 34 of 42 measures and the Local Leader Group (Group II) changed in a favorable direction on 28 measures. These results contrast with the 16 favorable changes in the Individual Therapy Group (Group III) and 10 favorable changes in the Control Group. In the latter two groups, the tests indicate increasing delinquency proneness despite a year of intensive therapy or traditional probation counseling.

The trend results provide strong evidence for the conclusion that the group approach is superior to the individual case approach in attempts to rehabilitate glue sniffers. The dramatic superiority of the School Dynamic Group in objective measures of favorable change in behavior indicates the effectiveness of continuous help and support in the school system.

Recommendations and Conclusions

First, a group techniques professional should be employed to train and guide probation counselors assigned to employ the group approach in neighborhoods with chronic problem glue sniffers.

Second, some counselors should move into community centers or other facilities in neighborhoods known to contain large numbers of glue-sniffing boys. It is difficult, but possible, to organize known glue sniffers into a solid supportive group and to change group standards and patterns of activity.

Third, special educational experiences should be provided for glue sniffers and other under-achieving children who reflect anti-social symptoms. A special teacher should be assigned to conduct class on a group approach basis, providing both instruction and counseling, and to work in conjunction with the group techniques professional.

Fourth, when functioning groups begin to emerge in neighborhoods and in the school, meetings with parents and other family members should be held. The objective of such meetings would be to gain family member support for the goals of the group aproach, including more productive social and school performance and the development of healthy self-concepts. When family members become aware of the improved performance of the teenager, perhaps there will be an improvement in relations between him, a (former) glue-sniffer, and his parents and siblings.

Fifth, a boy who has changed his behavior to a socially acceptable and personally healthy pattern should be released from probation but allowed to remain in the group, should he desire, as a model for others and for his own further support and self-growth through participation in the group. Perhaps two years of involvement in this process will be necessary for the average habituated glue sniffer to stabilize the gains he has achieved.

Sixth, a similar group approach program can be developed for glue-sniffing girls. Joint boy-girl programming should be developed to provide constructive learning experiences in heterosexual relations.

4/ DRUG FILMS

SUGGESTIONS ON THE USE OF FILMS IN DRUG ABUSE EDUCATION

DAVID O. WEBER, Film Consultant, California Department of Public Health, and JOSEPH FIORELLI, Audio-visual Specialist

Users of LSD say that the quality of a trip depends on several factors. One is the grade of acid taken. Another is dosage—a fledgling will almost certainly fly on 250 micrograms while the same amount may barely get a hardened tripster off the ground. Two other essential factors are the "set" and the "setting."

Set means the ideas, the mood, the rationales a user carries with him into the experience. If he is fearful, antagonistic before he begins his trip, he is likely to have a bummer.

Or, if the setting is wrong—unpleasant physical surroundings, bad vibrations from those around him, distracting noises or lights or music—even a positive set can be negated.

The use of drug films to educate young people about dangers of drugs can be compared with the use of LSD.

First, the quality of films, as of drugs, varies widely. Many films still in circulation have lost their potency through age. Hats, hems, automobiles, outmoded slang, may distract from and vitiate the message, no matter how timeless. Or, a film which is up-to-date visually may be hopelessly marred by jingoistic phrases and atavistic attitudes. "Know your dealer," they say in the streets. Applied to films, this translates to know something about the producers of films whose use is contemplated and, if at all possible, sample the dose in advance by previewing them before an audience that will not be harmed if the film is bad.

In addition to quality, drug abuse films vary in type. Some take the sociological approach, warning against the loss of income, status, dignity, even freedom (if jailed) attendant upon addiction. Some are purely descriptive of drugs and their effects. Some show in great detail the ways drugs can be abused. Some maintain a studiously determined distance. Some are dramatizations, some documentaries, some lectures, some cinematic essays. Most are a combination.

Some project a tone of moral outrage, others a tone of cool scientific detachment. Some attempt to deal with a broad spectrum of drugs—these are fewest in number and probably the most needed—others treat only one drug or one class of drugs. Needless to say, none of these films will give audiences identical trips.

It might be worthwhile to ponder in advance what functions a film should perform:

For example, is one purpose of a drug film to show teenagers how heroin is prepared and injected, how marihuana is smoked, how glue is inhaled—so that they can recognize and avoid these situations when encountered? Should a film be propaganda, supplying the moral element to the classroom's dispassionate discussions?

Should a film, because it lists a lot of doctors as consultants, be considered unimpeachable authority? Or should it be questioned, and if necessary demolished, in the presence of its audience? As set down, of course, these are loaded questions. Unfortunately, most drug films are similarly loaded.

The next consideration in selecting a drug abuse film, to continue our LSD metaphor, should be the set. What's the mood and character of the audience? Obviously, rural junior high school students will find little to identify with in a film about big-city junkies. Nor will ghetto blacks do much but cackle at the cinematic drug despair of an affluent, blond, sports-car-driving Kampus-King protagonist. Only through careful assessment of the set of an audience can a film user hope to turn it on meaningfully.

Finally, the setting must be such that the trip will be good, not bad. Most drug film audiences are captive. They can't question the film about obscure points, they can't argue with it (though they can catcall and mutter). If their boredom threshold is breached, they nod off.

Guides to the use of films are difficult to set forth because each teacher and teaching situation is different. However, there are some basic rules that if followed improve chances of success.

A good rule to start with is to be as wary of films as of drugs. Some precautions to be kept in mind are: Don't trust a film to be good just because someone says it is: no one film is good for every situation . . . Don't trust even a good film to contain only accurate information . . . Don't trust one expert: consult several.

If possible, preview a film before ordering it. That failing, request delivery several days in advance of the scheduled showing in order to view it, preferably with a few teachers or students whose opinions and reactions will be helpful.

Do not hesitate to use only portions instead of complete films, filmstrips, or tapes. Imaginative teachers have put together excellent shows by combining parts of several films.

Before a showing, check equipment to be sure it is mechanically and optically satisfactory. Ideally, back-up projectors and sound equipment should be on hand in case of an equipment breakdown. If there is a breakdown and no back-up, it is usually better to postpone the presentation entirely than to interrupt it for a lengthy repair job.

Room arrangements should be checked to assure sufficient darkness and satisfactory viewing from all seats. Materials should be racked and ready so that the film showing can start immediately after the introduction. If something intervenes between the introduction and the showing, the meeting should be brought back into the proper setting by a reintroduction.

Generally, no film should be used for educational purposes without oral introduction or explanation. The introducer can tell the purpose of the film showing, reasons for selecting the film, what to look for in it, what questions or reactions will be discussed after the showing.

Ample discussion time should be scheduled to follow film showings. The discussion period may contribute more to the desired objectives than the film showing.

Nothing should be permitted to interrupt a film showing. Unless latercomers can enter without distracting the audience, the entrance door should be barred.

Where practical, audiences should be kept small. A large group can be separated into sub-groups if necessary. In intimate groups, comments and criticisms come more freely, and there is opportunity to correct errors, misunderstandings, and inaccurate inferences.

Some think that, for teaching purposes, all films should be shown twice, with a discussion period in the middle and perhaps another one following. It is a possibility to be considered.

ANNOTATED LISTING OF DRUG ABUSE FILMS

CAUTION: No film gives all the answers, and some bring more problems than solutions. Preview any film before showing it, match the film to the audience, remembering that no film is suitable for every audience. Encourage viewers to discuss it pro and con afterwards.

Purchase and rental prices are given where possible.

Prints may often be borrowed from State or local health departments, film libraries, boards of education, and from regional offices of the Bureau of Narcotics and Dangerous Drugs.

Free loan prints of many of these films may be obtained from the National Institute of Mental Health Drug Abuse Film Collection, National Audiovisual Center, General Services Admin., Washington, D.C. 20409

Title	Length B&W or color	Coverage	Target Audience	Producer or Distributor	Purchase or Rental
DRUG ABUSE: THE CHEMICAL BOMB 1969	19 min. color	Barbiturate pills, methedrine, glue & deliriants, marihuana	Jr & Sr. High School, suburban	Film Distributors International, 2223 S. Olive St., Los Angeles 90007	Purchase $225 Rental Information on request
CBS REPORTS: MARIHUANA 1968	52 min. B&W	Marihuana	Sr. High School, Adult, General	Carousel Films, Inc. 1501 Broadway, New York 10036	Purchase $275 Rental $20
LSD: THE TRIP TO WHERE 1968	28 min. color	LSD	Sr. High School, Adult	McGraw Hill Films, Hightstown, New Jersey 08520	Purchase $325 Rental $16 daily
WORLD OF THE WEED 1968	21 min. B&W	Marihuana	Sr. High School, College, Adult	NET Film Service, Indiana University Audio-visual Center, Bloomington, Indiana 47401	Purchase $125 Rental $4.65
THE LAW: HOW EFFECTIVE IS IT? 1968	36 min. B&W	Marihuana	Sr. High School, Adult, General	NET Film Service, Indiana University Audio-visual Center, Bloomington, Indiana 47401	Purchase $180 Rental $7.40

Title	Length B&W or color	Coverage	Target Audience	Producer or Distributor	Purchase or Rental
RESEARCH REPORT: THC—THE CHEMISTRY OF MARIHUANA 1968	36 min. B&W	Marihuana (THC)	Adult	NET Film Service, Indiana University Audio-visual Center, Bloomington, Indiana 47401	Purchase $180 Rental $7.40
LSD, TRIP—OR TRAP 1968	20 min. color	LSD	Jr. & Sr. High School, College	Sid Davis Productions, 2429 Ocean Park Blvd. Santa Monica, Calif. 90405	Purchase $240–color $120–B&W No rental
ESCAPE TO NOWHERE 1968	25 min. color	LSD, marihuana Hashish Heroin Methamphetamine	Suburban Sr. High School, Students, suburban adults	Professional Arts, Inc., P.O. Box 8484, Universal City, California 91608	Purchase $275 Rental $27.50, 3 days
THE DISTANT DRUMMER 1968	three 22-min. films Color	LSD Methedrine Marihuana Heroin	Adults	National Institute of Mental Health Drug Abuse Film Collection	Free loan
MARIHUANA 1968	34 min. color	Marihuana	Jr., Sr. H.S., College, Adults	Bailey-Film Associates, 11559 Santa Monica Blvd. Los Angeles 90025	Purchase $350 Rental $25, 3 days
THE MIND BENDERS—LSD & THE HALLUCINOGENS 1968	26 min. color	LSD Psilocybin Mescaline DMT	Sr. High School College	National Medical Audiovisual Center Chamblee, Ga. 30005	
BEYOND LSD 1968	25 min. color	"Drug-taking" in general	Middle Class suburban adults	Film Associates of Calif., 11559 Santa Monica Blvd., Los Angeles, Calif. 90025	Purchase $300
LSD: INSIGHT OR INSANITY? 1968	28 min. color	LSD	Jr., Sr. H.S. Adults	Bailey-Film Associates, 11559 Santa Monica Blvd. Los Angeles 90025	Purchase $300 Rental $25, 3 days
DRUGS & THE NERVOUS SYSTEM 1967	18 min. color	Aspirin, glue Amphetamines Barbiturates Opiates, LSD Marihuana	Jr., Sr. H.S. Adults	Churchill Films 662 N. Robertson Blvd., Los Angeles, Calif. 90069	Purchase $170 color
NARCOTICS: THE INSIDE STORY 1967	12 min. color	Narcotics LSD Marihuana Tranquilizers Sedatives	Jr., Sr. High School	Charles Cahill & Assoc., Inc. P.O. Box 3220 Hollywood, Calif. 90028	Purchase $145 No rental
THE HIPPIE TEMPTATION 1967	51 min. (Pt. I, 31 min., Pt. II, 20) color	LSD	General Sr. High School Adults	McGraw-Hill Films Hightstown, New Jersey 08520	Purchase $600 ($300 ea. part)
THE CIRCLE 1967	57 min. B&W	Heroin	Adult, General	McGraw-Hill Films, Hightstown, New Jersey 08520	Purchase $340 Rental $15 daily

Title	Length B&W or color	Coverage	Target Audience	Producer or Distributor	Purchase or Rental
THE SEEKERS 1967	10 min. color	Heroin Marihuana LSD	Sr. High School	State of New York Drug Addiction Control Commission Albany, N.Y. 12203	
HOOKED 1967	20 min. B&W	Heroin	Jr., Sr. High School	Churchill Films, Inc., 662 N. Robertson Blvd. L.A., Calif. 90027	Purchase $125
LSD: LETTVIN VS. LEARY 1967	54 min. B&W	LSD, Marihuana	Adult, general	NET Film Service Indiana University Audiovisual Center Bloomington, Ind. 47401	Purchase $210 Rental $8.90
LSD 25 1967	27 min. color	LSD	Sr. High School, College, Adults, General	Professional Arts, Inc., P.O. Box 8484 Universal City, Calif. 91608	Purchase $275 Color
LSD 1967	28 min. color	LSD	U.S. Navy personnel	Audiovisual Branch U.S. Navy, Pentagon, Washington, D.C. 20301	Purchase $114.39
FIGHT OR FLIGHT 1967	16 min. color	Heroin, LSD Marihuana "Pills" alcohol cough med.	Jr., Sr. High School	J & F Productions, Inc., Suite 700 1401 Walnut Street Phila., Pa. 19102	Purchase $150 No Rental
FDA SPECIAL REPORT: DRUG ABUSE—BENNIES & GOOFBALLS	20 min. B&W	Amphetamines Barbiturates	Sr. High School Adults	Precision Film Labs., 21 W. 46th St., New York, N.Y. 10036	Purchase $30.79
LSD: THE SPRING GROVE EXPERIMENT 1966	54 min. B&W	LSD	Sr. High School, College, Adults, Professional	McGraw-Hill Films, Hightstown, New Jersey 08520	Purchase $275 Rental $25
HIDE AND SEEK 1966	14 min. color	Heroin Marihuana	Suburban College, Jr., Sr. High School	Center for Mass Communication of Columbia Univ. Press, 440 110th St., New York City 10025	Purchase $150 Rental $11
NARCOTICS: WHY NOT 1966	15 min. color	Heroin Marihuana "Pills" Glue	Jr., Sr. High School, Adults	Charles Cahill & Assoc., Inc., P.O. Box 3220 Hollywood, Calif. 90028	Purchase $175 col. $90 B&W No rental
NARCOTICS: PIT OF DESPAIR 1965	28 min. color	Heroin Marihuana "Pills", Beer Cigarettes	Sr. High School	Film Distributors, International, 2223 S. Olive St., Los Angeles, Calif. 90007	Purchase $275
NARCOTICS: THE DECISION 1961	30 min. color	Heroin Marihuana "Pills" Alcohol	Sr. High School	Film Distributors, International, 2223 S. Olive St., L.A., Calif. 90007	Purchase $275 Rental $17.50
TOMORROW MAY BE DYING 1960	23 min. B&W	Heroin "Pills" Alcohol Aspirin	Sr. High School College	Cinema Dept., Graduate Workshop, Univ. of Southern Calif., Univ. Park, L.A., Calif. 90007	Purchase $138 Rental $6.50

Title	Length B&W or color	Coverage	Target Audience	Producer or Distributor	Purchase or Rental
THE LOSERS 1960	31 min. B&W	Heroin Glue "Pills" Marihuana	Adults High School General	Carousel Films, Inc. c/o Association Films, 600 Grand Ave., Ridgefield, N.J. 07657	Purchase $145 Rental $10, Postage
SEDUCTION OF THE INNOCENT 1960	10 min. color	Heroin Marihuana "Pills"	Jr., Sr. High School	Sid Davis Productions, 2429 Ocean Park Blvd., Santa Monica, Cal. 90405	Purchase $120 col. $60 B&W No rental
THE ADDICTED (PART II, CRIMINAL OR PATIENT?) 1958	28 min. B&W	Heroin	Adult General	Association Films, Inc., 600 Grand Ave. Ridgefield, N.J. 07657	Purchase $150 Rental $8.50, Postage
MONKEY ON THE BACK 1956	27 min. B&W	Heroin	General	McGraw-Hill Films Hightstown, New Jersey 08520	Purchase $140 Rental $8 day
THE DANGEROUS DRUGS 1956	22 min. color	Barbiturates Amphetamines	High School General Adults	Narcotic Education Foundation of Amer., 5055 Sunset Blvd., Los Angeles, Calif. 90027	Purchase $235 color $125 B&W $12.50/day (col.) $6/day (B&W)

5/ HOW TO PLAN A DRUG ABUSE EDUCATION WORKSHOP

Sanford J. Feinglass, Ph.D.

INTRODUCTION

How to teach primary and secondary students about the dangers of drug and abuse is a problem plaguing educators. Most realize that the simple expedient of reaching for an all-purpose speaker, film or pamphlet is not the answer. Programs and techniques capable of effectively influencing young people must be attuned to the complexities and anomalies that characterize today's youth scene.

Approaches to drug education must be as varied as the numerous and diverse causes that motivate varying types of students to turn to drugs. Some of the common motivations are: peer pressure or influence; status search; rebellion against parents; revolt against the world and its institutions; boredom; curiosity; dislike of schools or teachers; myths about drugs.

Drug education may be taught in connection with health education, social studies, history or other disciplines or several of them simultaneously. Starting in elementary grades, with focus on prevention, is advisable. Above the primary level, programs aimed at intervention may be required. At all grades, a factual, nonmoralizing presentation is essential. Skills in communicating with youth are also essential, as are systems and schedules of evaluating programs to monitor their effects and results.

The element of over-riding importance in drug education is the teacher. His role is not merely that of a conduit of knowledge. He must, in addiction, personify an active force in molding student actions and beliefs. Honesty and integrity that will gain student respect, ability to recognize and respond to student problems, and needs, and to show care and concern—these are the prerequisites for a successful mentor in the drug abuse education field.

Directors charged with conducting inservice training to guide teachers in presenting effective drug education have a difficult task. These guidelines will, it is hoped, help in the endeavors of workshop directors. However, it is strongly urged that all workshop directors attend an inservice workshop before conducting their own. Experience in and observation of the precepts and suggestions presented in the following pages will make them easier to understand and to apply.

PHILOSOPHIES OF DRUG ABUSE EDUCATION

In planning inservice teacher workshops that have as their objective effective drug abuse education in primary and secondary schools, here are some concepts to be considered:

1. Effective drug education should take into consideration that we live in a drug-using society. People look to drugs to alleviate a host of physiological, psychological and social discomforts, with varying degrees of success. Young people brought up on television have been told that pills reduce anxiety and tension, provide buffers for everyday living, perform other near miracles. There is a relationship between the advertisements of tranquilizers to face daily living, liquor for celebration, and the use of marihuana at a rock concert.
2. Some young people of all income levels adopt the theory that using marihuana is not vastly different from the use of alcohol, tobacco or pills. Educational efforts that do not cover the entire spectrum of drugs, including tobacco and alcohol, strike students as examples of adult hypocrisy and deafen young ears. On the other hand, good response has been reported to education that gives the facts about drugs, and distinguishes between drug use, misuse and abuse.
3. Young people, in relation to drugs, can be categorized as (1) those who will not abuse drugs or can easily be prevented from doing so, (2) experimenters, (3) abusers. Just where the emphasis should be in education about drugs depends on the age of the students and the situation in a particular school.
4. Surveys show that motivations for drug abuse among the young are varied and frequently complex. Among them are: peer influence, desire for kicks, escape from feelings of inferiority, relief from routine lives, easing of pain from adolescent problems. To many young people, the old-time rituals of religion, country, family and school have lost their appeal—and drugs, astrology, youth subculture, are among the substitutes. Educational emphasis should be on ways of coping with youths' problems rather than on picturing drug users as "depraved" individuals, which has proved to be ineffectual.
5. Untruths, exaggeration, sensationalism and moralizing kill the effectiveness of drug education. If 20% of the students in a classroom of 50 have used a drug, there are at least ten students carefully measuring the teacher's words against empirical knowledge. At least 30 students will know the ten as users and be briefed by them. With 40 of the audience of 50 in good position to judge the accuracy of a teacher's statements about a drug he probably never has tried, any discrepancies will be quickly noted and used to breed distrust of the total presentation.
6. Some drug use in school presumably stems from disaffection with the educational process. An interview with one student illustrates this. Asked, "Do many kids go to school stoned?"

the student's reply was "yes." The next question was, "Doesn't this impair your efficiency in school?" The answer, "Of course." After that, "Well, why do you do it?" His answer was, "I wouldn't be able to stand school any other way." This student's problems were not drugs per se, but an unfavorable home-school environment.

7. An "all school" program is no way to conduct drug education. The normal rules of school are suspended, all classes stop, students assemble, people are invited from the community, and one or two films—often sensational or lurid and more likely to breed drug use than to suppress it—are shown. This "why it's dangerous to use drugs" approach is likely to make many teenagers feel that if they haven't tried drugs they're missing something.
8. Young people delight in pointing out the inconsistencies and hypocrisies in drug legislation and enforcement, and while they should be informed of the penalties of drug possession and use, nothing is to be gained from trying to defend the inconsistencies of drug legislation. The fact that court records can jeopardize careers in teaching, medicine, law and government may have some effect on college students. However with most youths, threats make no impression. They argue that the adult community commits legal transgressions, why shouldn't we?
9. In distinguishing between drug use and abuse, a useful definition for educators is that abuse occurs when a drug is used in such a manner as to interfere with community-accepted standards of economic, social, psychological or physical well-being. It is important to recognize that all substances have abuse potential—salt, sugar, aspirin, marihuana, whatever.
10. The basic deterrents to drug use are evidently not directly connected with drugs. Among them are: Interest and participation in school programs; alternatives to drug use offered in the home and community; areawide to nationwide actions on issues in which youth are concerned. Youth's need to be involved in the current scene starting at the primary school level must be recognized by educators, who can cite evidence that drug abuse can be highly detrimental to the individual as well as destructive to public welfare and advancement. If in addition drug abuse education moves toward encouraging communication between youth people and adults, it can accomplish more.

OBJECTIVES OF INSERVICE TRAINING FOR DRUG ABUSE EDUCATION

Before plans are made for inservice training programs, it is wise to determine objectives which in turn will help determine program content. Here are some guidelines for selecting objectives.

A. Objectives for school administrators (those who cannot attend may also profit if given reports by educators who do attend):
    1. Transmittal of general information about drug problems in the nation, locality, community, school.
    2. Briefings on national, state and local laws, and other legal aspects.
    3. Provision of information and evaluation of programs in other school districts to combat drug abuse.
    4. Development or promotion of programs to combat local drug abuse.
    5. Gaining support for school/district drug abuse programs.

B. Objectives for teachers enrolled in inservice training (all of the objectives cannot be achieved in a single conference):
    1. Changes in teachers' knowledge, insights, attitudes, skills
        a. Increased knowledge on drugs—pharmacological, psychosocial, or legal—or all three.
        b. Ability to discriminate between fact and fiction regarding drugs.
        c. Ability to recognize personality problems related to drug abuse.
        d. Ability to evaluate written and audiovisual materials about drugs.
        e. Development of increased skill in encouraging wise decision-making.
        f. Increased awareness of the nature of the youthful subculture and an accumulation of subconscious knowledge to assist in verbal and non-verbal communication skills.
        g. A valid aspect of inservice training would be to encourage teachers to evaluate their own competence as drug educators, and to decide whether, because of their personal convictions, they might do a greater service to students by not assuming the role of drug mentor.
    2. Changes in teachers' relationships with their students:
        a. Development of more sympathetic attitudes towards youth, with increased understanding of the stresses and problems they face, and increased ability to propose rewarding alternatives to drug use.
        b. Development of ability to show caring and concern for students who feel deprived of parental or other love.
        c. Ability to convey drug information to students—pharmacological, psychosocial, legal—or all three.
        d. Increased ability to communicate with students and to develop communicative skills.

   - e. Ability to contribute to students' sense of personal work and integrity.
   - f. Development of students' decision-making abilities.
   - g. Strengthening student skills in evaluating such influences as commercial ads, news reports, novels, dramas.
   - h. Development of student sensitivity to the feelings of others.

C. Objectives of inservice training in terms of parent and community relations:

   1. To increase public and parental awareness of the nature and scope of drug abuse in the local community.
   2. To increase public and parental understanding of the tangible as well as intangible factors that contribute to drug abuse by youth.
   3. To help teachers work with parents of drug abusers.
   4. To demonstrate by the conduct of inservice training the serious concern of the school in drug education for youth, and the need for parental and community cooperation.

ORIENTATION PROGRAM

Inservice training is often preceded by an orientation program to enlist school or school district support for such training. The orientation program may take several forms.

1. Length and timing

   Orientation sessions for the faculty of a school or school district can range from one-hour after-school programs to an all-day program or two afternoon sessions of two or three hours each, preferably on consecutive days.

   Orientation programs for parents and the general community, in addition to the school or school district personnel, would consist of one or more one-to-two-hour sessions and focus on general presentation of the drug abuse dilemma rather than on the contents of a specific inservice training program.

2. The director

   The orientation program director is usually the same person who serves as inservice training director. He (or she) should have supervisory status to get the necessary attention and cooperation, working knowledge of the drug field and its literature, and the ability to locate and enlist experts as program leaders and consultants.

3. The invitees

   Faculty including counselors and nurses, school board members, administrators, supervisors and PTA officers might be invited. For a community orientation program, efforts should be made to have not only parents but community leaders such as the mayor, legislators, judges, police officers and physicians, attend.

   It is recommended that students be included in the audiences of orientation programs. Preferably, known or suspected drug users as well as non-users should be represented. Their attendance will add to the credibility and validity of the programs and their critiques, if truthful, can provide valuable guidance for future activities.

4. Program content

   The content of an orientation program will depend upon the objectives, the time allotted, the availability of speakers, the possibility of including audience-participation activities, and other locally varying circumstances. Usually, orientation programs attempt to give a general briefing on the local drug problem and a preview of the forthcoming inservice training program.

5. Orientation speakers, discussion leaders, consultants

   Speakers and discussion leaders for orientation sessions are in reach of most schools. The following section, "Selection of Inservice Speakers, Discussion Leaders, Consultants," presents a comprehensive list of sources from which orientation speakers can be selected. Invited guests are most likely to attend orientation programs if the speakers and the organizations they represent are known and respected in the community.

PLANNING AND CONDUCTING AN INSERVICE TRAINING WORKSHOP OR CONFERENCE

1. *Scheduling and timing*

Inservice training can be scheduled in either continuous or interrupted programs. *Continuous programming,* which is the preferred, occupies a full weekend, week or longer span of uninterrupted time. Probably the most practical is a two-to-seven day intensive workshop or conference for teachers from one school or one district. Summer is an excellent time to hold such a workshop if the teachers to be reached can allocate the time.

An *interrupted program* consists of a series of interspersed meetings, each from one to eight or so hours long. Some possibilities are: alternate Saturdays, certain days or evenings of consecutive weeks.

Continuous Workshops

Advantages of continuous workshops are:

The concentrated approach facilitates producing attitudinal changes in teachers regarding their students and their relationships with them. The reason: attitudes are most readily changed in connection with strong emotions, which are usually experienced only in sessions longer than those possible in interrupted programming.

Continuous programs isolate participants from extraneous matters, permit uninterrupted attention.

Relationships and comparisons between speakers and other program events are more clearly seen in continuous programming than when time lapses between events.

Interaction between participants is facilitated, particularly if all are housed in one location.

Continuous programming permits more flexibility in length and size of sessions and in introducing innovative and experimental techniques.

Time can be utilized more efficiently since the initial physical and psychological adjustments need take place only once, and the atmosphere is more likely to be friendly, informal, comfortable, and conducive to learning.

Communication and sharing of experiences between participants are easier.

Disadvantages of continuous workshops are: that only a comparatively small number can usually be accommodated and in view of time pressures, difficulties in obtaining teacher substitutes, and financial problems, it is difficult to find one time span convenient even to a small number of teachers.

Interrupted Programming

Advantages of interrupted programs are:

They are less expensive.

They are easier to program, as free time such as weekends, holidays and faculty days can be utilized.

Such programming permits homework or reading assignments.

Participants may keep their professional obligations with the least interruption of time and necessity of providing substitutes. A wider range of participants are therefore, attracted.

Participants may select those sessions they wish to attend, if professional commitments preclude continuous attendance.

Interrupted programming is more likely to attract school or district administrators and others who can attend individual but not prolonged programs.

It is easier to schedule outside experts since they are given a wider choice of dates.

Disadvantages of interrupted programs are:

Field trips are difficult to fit in.

Some kinds of programs are difficult to schedule as, for example, those that must be presented in connection with others to give balance.

Changes in attitudes or emotions are difficult to achieve in interrupted programming.

Some general suggestions on timing of inservice training are:

As much advance notice as possible should be given to potential participants. For a continuous program, several months would not be too far in advance.

Most program directors avoid scheduling programs during examination and registration periods and on holidays and days of such events as elections and important sports or school events. However, for some purposes and participants, programming on such days may be suitable. It is often well to consult the convention schedules of organizations to which workshop participants belong in order to avoid conflicts; although here, too, inservice training may sometimes be scheduled in connection with conventions and may utilize some of the same speakers and program leaders.

For continuous programs, accommodations may be more available and lower-priced at certain times of the year.

2. *Workshop locations*

   One- or two-hour programs can be held in temporarily vacant facilities such as school rooms, auditoriums, government facilities, or churches. For overnight or longer programs, ideally a facility should be sought which is not part of the daily routine of the participants. A motel outside the city, a mental or youth hospital or treatment center, or other facility in which the participants will be isolated from their ordinary surroundings and can devote their undivided attention, provide desirable settings.

The inservice training director

Attributes helpful to a workshop or conference include:

a. Interest and some knowledge in the drug field, realization that there are complex underlying issues, and desire to deepen and broaden his own perspectives. If a director does not grow in personal understanding through conducting a workshop, it is unlikely that he will add substantially to the growth and knowledge of the participants.

b. Wisdom in adolescent problems and psychology. Effective workshops not only transmit information on drugs and drug abuse, but survey the forces within society and the educational system that contribute to drug problems.

c. Evaluative ability. A director must be able to evaluate written and audiovisual material to rout out false or biased information.

d. Contacts with youth. A workshop director must be able to turn to students to get information on their attitudes, informational levels, life styles. He must be able to consult students freely and frequently —including non-users, suspected users, and school drop-outs.

e. Respect of teachers. Inservice directors must themselves be able to understand and respond to inservice trainees in order to help them increase their ability to communicate with students.

f. Related knowledge that will be helpful includes general information on runaways, underachievement, protest movements, sexual behavior and general juvenile delinquency.

g. The director should possess sufficient authority to get things done, have adequate financing, and be relieved of the majority of other obligations in order to concentrate on the workshop program.

4. *Inservice training participants*

   Since inservice formats vary from weekend retreats to auditorium lectures, no one optimum number of participants for all varieties can be set. As a rule, workshops targetted to intensive learning experiences and involving living accommodations for several nights or longer do not have more than 30 participants. A larger number is likely to be too cumbersome and impersonal to effect personal changes. On the other hand, a smaller number reduces opportunities for interaction and intercommunication and increases the cost per participant.

Participants should represent the several disciplines most likely to be involved in drug education—health education, science, social studies, nurses, etc., as well as school administration and guidance counseling. In the interests of facilitating integrated approaches in a school or school district, it is helpful to include teachers in grades from elementary through high school. However, since the education directed to primary and secondary school students will differ, separate sessions or programs may be necessary to cover different material for varying age groups.

Administrators and supervisors should be urged to send their best-qualified personnel. This is easiest done if the inservice workshop sounds important, and has the prestige afforded by well-qualified speakers and program leaders.

Participants should be those considered to have good rapport with students. Not only will they be the most effective in influencing youth after the training, they will be able to contribute to the workshop the student point of view.

Inservice training for a specific target will, of course, have a specific audience. For example, a preventive program aimed at students who have not begun to experiment with drugs would be primarily directed to elementary grade teachers. Training that has the integration of teaching and referral services as its goal would have a broader focus—joining teachers with school counselors, nurses and psychologists.

Efforts should be made to assure that attendance is motivated by real concern with youth rather than by curiosity, desire for prestige, or similar motives. Open-minded individuals, as opposed to those known to have fixed or hostile positions, would preferably be selected except where inservice training might change an attitude or where an individual is included as a foil demonstrating the disadvantage of inflexibility.

Participants should agree to remain through the entire training period, barring emergencies, and to attend all sessions.

5. *Program content*

The title or theme of an inservice workshop will help determine its framework and should be chosen with more than cursory thought. Such phrases as "Leadership Training for Drug Abuse Education" have specific implications that should be fulfilled. On the other hand, if a title includes the phrase "drug abuse," this should not close the gate to a discussion of drug use.

Within its time limitations, general inservice training should cover as broad a base as possible. Teachers need a good store of knowledge to hold their own with the free-thinking, curious young people most apt to turn to drugs. Ill-prepared teachers may only turn student doubt and distrust of adults into alienation.

If all of the aspects of drug education cannot be covered in a training course, the principal categories can at least be enumerated to the participants. A respectably complete list would include:

a. Brief history of drugs and drug use.
b. Pharmacology of drugs including alcohol and tobacco: effects, addictive qualities.
c. Psychosocial aspects: personalities predisposed to drugs; society's stake in drugs; characteristics of the drug subculture; value systems; moral implications; true and false notions about drugs; youth alienation and protest; counseling services.
d. Legal aspects: local and Federal drug law enforcement; judiciary, parole and probation; possible changes in laws; how to counsel apprehended youngsters.
e. Research: latest findings on effects and side-effects of drugs or lack of them; statistics; future prognostications.
f. Student views on drugs vs. community views.
g. Financial aspects.
h. Drugs in religious or mystical experiences.
i. Alternatives to turning on with drugs.

In all of the above, alternate viewpoints should receive honest consideration. Diametric "good" and "bad" approaches are not helpful in drug education.

Intelligent and sophisticated students can often give good advice on program content and should be consulted.

Instructional methods used in inservice training will include both the standard techniques of, say, an English literature course and experiential group dynamics methods such as the Amherst approach in which students are given reading material presenting divergent opinions. Under a trained, well-versed teacher, discussion is held analyzing the conflicting opinions and discrepancies. If conclusions cannot be reached, students are assigned to obtain additional data and the process repeated until conclusions are forthcoming. Other experiential exercises are listed in the section on group process activities.

6. *Selection of workshop speakers, program leaders, consultants*

   Within the limitations of budget and time, the director will want to expose inservice trainees to the widest possible range of speakers and other program leaders in terms of disciplines, attitudes and opinions. This does not mean presenting a miscellanea. Every speaker's philosophy or point of view should be known and reflected upon in advance. All speakers and events should contribute to the over-all purpose and theme, should be the best choice for the purpose, and should be placed on the program in the order most effective for the total plan and pattern.

   Locating qualified resource persons requires considerable time and effort. In most cases it will be by consulting large numbers of people and references and by asking many questions that the right programming decisions will be made. Given for example the alternatives of an anestheologist who is chairman of a county medical society and a general practitioner, a workshop director might choose the first—unless he found out by investigation that the practitioner had done clinical research on use of drugs and was sought after by young people as a medical authority and confidant.

   Spokesmen should be selected not for the authoritative positions they hold but for the authoritative information they can communicate. What is wanted is not hearsay or opinion based on vested interest or personal bias but a statement of position founded on firsthand experience, research, or observation. Individuals in eminent positions whose rank is due to administrative ability rather than specialized knowledge may not be suitable for such assignments. That is, an executive who is required to be a spokesman for his institution and to reflect favorable light on it may not be as good a choice as his special assistant who is expert in a particular field.

   Another precaution to be noted is that a balanced program does not mean a simple yes-and-no format, unless the intention is to use conflict to spark discussion. Little is to be gained from a program consisting of one articulate person arguing for legalization of marihuana and another arguing against it. An example of a better format would be, assuming no immediate change in the marihuana laws, to examine from various viewpoints the positions of students who hold that marihuana laws are inequitable and therefore should be violated.

   Where can one begin to look for program participants? One might start with activities in the community that deal with drug abuse—a halfway house, local research project, or drug clinic. Those in touch with drug users might be queried, such as operators of cafes and meeting places frequented by students as well as disc jockeys, ministers and other adults who relate to youth. Opinions of students—users, non-users and if possible drop-outs, should surely be sought. Educators who have conducted workshops report that their suggestions are often excellent.

   Additional sources, and some of the types of individuals to be considered for workshop leadership, include:

   a. Colleges and universities: departments of psychology, pharmacology, sociology, anthropology, medical schools, law schools, teachers colleges.
   b. Mental health units and societies; public health agencies; other health organizations.
   c. Physicians; psychiatrists.
   d. Police and law enforcement officers who relate to the community scene.
   e. Juvenile courts; juvenile detention centers; prison administrators.
   f. Student leaders of school and church organizations.
   g. Teachers conducting successful drug programs.
   h. YMCA, Boy Scout and other youth organization leaders.
   i. Social welfare organizations; child guidance centers; hospital personnel.
   j. Press representatives; editors of underground papers.

k. Musicians popular with student groups.
l. VISTA and Job Corps staffs; the managers of runaway location centers found in some localities.
m. Ex-addicts; ex-alcoholics.

A factor to be kept in mind is that drug abuse is a controversial subject and some of the speakers at a workshop on drugs are likely to be controversial too. School or district administrators sponsoring inservice training should be prepared to provide protection and defense for workshop directors in case of complaints about speakers and panelists who may be displeasing to some citizens.

7. *Arrangements with workshop speakers, program leaders, consultants*

In making arrangements with inservice training speakers and program leaders, the director should make clear the purpose and general content of the conference or workshop, the size and make-up of the audience, the topic and scope the speaker is expected to cover, the period of time allotted and, in the case of a panel member, the range to be covered and the names and affiliations of the other panelists. Similarly, the speaker should be asked to confirm his understanding of the arrangements.

Details on which agreement should be reached include:

a. Money. It should be clearly stated when a speaker is invited whether he will receive a fee or honorarium, whether travel and other expenses will be reimbursed, and to what extent.
b. Travel. It is advisable to know how and when a program leader will arrive. Then, if it develops that planes are canceled, a program change can be made. Speakers should be told whom to contact on arrival or in case of emergency.
c. Pre-Program discussion. Provision of opportunity for last-minute discussion before programs is advisable. Some inservice directors ask program participants to arrive a half-hour in advance of their programs, others hold joint meetings for a number of programs leaders at once.
d. Introductions. Program participants must provide biographical data so that they can be accurately introduced. No more than one minute should be allowed per introduction. The only data that need be given are the qualifications and competence of the speaker, his affiliations, and perhaps, briefly, the purposes of his presentation. Many conference experts provide written biographies of all speakers, including their addresses and phone numbers, and confine oral introductions to names and affiliations only.
e. Questions and answers. Sometimes it is desirable to encourage the audience to interrupt speakers with questions throughout their presentation. This bridges the gulf between speaker and listener, helps listeners become actively involved in the presentation, helps eliminate inattentiveness. Speakers must be warned in advance if this method is to be used. More usually, a period of time is allowed for questions after a presentation. It should be understood by speakers and audience how long the period will be. Speakers and consultants should be instructed not to answer questions outside their sphere of competence: otherwise remarks of a psychologist about pharmacology may, for example, contradict statements made by a pharmacologist at the same meeting.
f. Taping-Videotaping. If a program is to be recorded on audio or video tape, clearance should be obtained from the speaker in advance. Some schools and districts have standard release forms. If transcripts or excerpts of a presentation are to be printed for subsequent distribution, permission should be secured for this too and, preferably, a copy sent to the speaker for review. Where many quotations have been used, a bibliography may be advisable. When taping is planned, recording equipment should be checked well in advance.
g. Material for distribution. If samples, printed matter, photos, or other material are to be distributed as part of a presentation, the material should be viewed by the director in advance. Nothing should be distributed without his knowledge. There should be sufficient quantity for all members of the audience.
h. Audio, visual and audiovisual materials. Audiovisual material accompanying a program should be previewed in advance by the director or his delegate, who should play the tapes at the same sound level to be used for the group presentation. Sound

distortions may show up at auditorium volumes that are not apparent at low volumes. Only by stressing to speakers the necessity of clearing visual and audiovisual plans in advance can a director be assured that proper equipment, from blackboards or chart stands to projectors and screens, will function smoothly.

i. Post-program. Speakers, panelists and consultants should not be left dangling at the conclusion of a program. An assistant should be delegated to help them with departure arrangements.

8. *Group process activities*

Group process and experiential techniques can be included in inservice training to improve participants' communication and awareness skills, increase their understanding and effectiveness in dealing with youth, promote self-understanding, and facilitate non-verbal communication with their students.

Inclusion of such activities in inservice workshops will assist teachers who wish to use the techniques as part of their own classroom instruction, after sufficient practice to learn to do so effectively.

Examples of experiential activities that may be scheduled during inservice training include:

a. Communication exercises: example—speaking precisely as audience listens carefully, followed by a playback of the speech on tape.
b. Simulated experiences of acceptance and rejection (see "Breaking In" and "Breaking Out" below).
c. Exercises to increase skill in observation.
d. Exercises utilizing group resources: See "Joy" by William C. Schutz and "Schools Without Failure" by William Glasser, available from most school libraries.

Inclusion of young people in group experiences is suggested for the insight into youthful reactions that can be gained thereby as well as for the feedback on potential use of the techniques with students.

Descriptions of some group processes that might be demonstrated during inservice training are given below. In all cases, it is advisable to have a director trained in use of the techniques conduct the sessions.

a. Sensory stimulation. High-degree sensory stimulation is a characteristic of youth culture. Multi-media presentations of hi-fi records, tapes and TV at high volumes, films, slides, and psychedelic lights—perhaps simultaneously—may enable inservice trainees to understand the appeal of sensory inundation to youth.

b. Peer group pressure. Much drug use is believed to result from peer pressure. A demonstration of peer pressure may be staged by having participants sit in a circle. The leader of the exercise asks that one of the participants—he should not specify or direct his request to any individual—volunteer to walk inside the circle formed by the seated participants. As this volunteer strolls around the inner circle, the leader asks if anyone cares to join him. He encourages the stroller to describe his feelings at being alone inside the circle. The "loner" will usually mention loneliness, discomfort, embarrassment. The leader continues to ask if anyone will join the stroller, help him out. As participants eventually join the inner circle, the leader enlarges the number of strollers at the expense of the sitters, and elicits remarks from both strollers and sitters regarding their feelings, opinions about themselves and the other group, and related comments. It will be seen that, as additional sitters join the inner circle, they become stronger in expressing opposition to the outer group and more indifferent to its comments. It has been shown by experiments that the expressions and comments of both the inner and outer groups frequently correspond closely to the discourse of drug users (inner group) and non-users (outer). The exercise continues until the leader stops it to review and analyze the participants' remarks. If it continues long enough, it will usually reach a point where the inner group reaches a size that acts as a magnet to draw heretofore uncommitted members of the outer circle into the new inner group. This is akin to peer group influence in schools where a sizable drug-using group will suddenly mushroom into one of substantially larger size.

While this exercise is highly recommended, it should be cautioned that, if the leader is not skilled and the group receptive, it may not be successful.

c. "Breaking out." A number of investigators have suggested that the inability of youth to discontinue drug usage after initial experimentation is due to inability to break through a condition of confinement. This may be demonstrated by having a leader—preferably one with experience in this technique—ask a participant to stand in the center of the room surrounded by a number of the participants with arms interlocked. The person on the inside attempts to break out of the confining circle. The difficulty of doing so is clearly illustrated. If the person is successful, the relief and profound psychological reaction can be shown by having him describe his feelings.

   This exercise, after demonstration with one person in the center, can be repeated with two or three, to show that multiple participants reinforce each other and are not as apt to give up the struggle as one person operating alone.

d. "Breaking in." A similar exercise can be conducted by having a participant attempt to break into a circle of people with arms interlocked. The purpose is to illustrate the frustration and unhappiness experienced by individuals refused access to a circle and the difference in their mental states when the barriers have been broken and access granted. Again, it is best if the leader has had group process training.

e. Breaking down formalized structures. The stultifying effect of ritualized procedures followed over and over again can be demonstrated by seating arrangements at a workshop or conference. At the beginning, the participants are seated in the standard classroom pattern, in chairs facing a teacher who lectures from his desk, with blackboard behind. The same people are at his right, left, front and back every day—the arrangement that students face, year after year throughout their school careers. After several days, the conference director rearranges the chairs and desks, has the speaker sometimes addressing from a lectern, at other times sitting or standing in the midst of the group. Periodically, audiovisual equipment is moved from one spot to another and projected to a screen similarly moved. Participants' chairs are moved or seats exchanged so that neighbors are varied. In some cases the site too is changed, the group moving from one room to another or outside. With transportation available, the change can be to a different community. Properly done, such demonstrations impress upon teachers the stimulation and vitalization that can attend change in or discard of ritualized procedures.

f. Illustration of frustration. The frustration that can result from stereotyped teaching procedures may be demonstrated with the help of construction toys such as erector sets or creative blocks. Participants are seated at tables with such sets and permitted to create interesting and intriguing constructions without direction or interference. While participants' interest in their creations is still at peak level, the leader suddenly orders the work disassembled. He then leads the participants, with ever-increasing arbitrary directions, through the construction of useless, unaesthetic and unimpressive forms. As time passes, the orders for manipulations become increasingly restrictive and stupid. "Hold A with your left hand, thumb and index finger, and pick up B with the thumb and third finger, right hand," etc. At some point the protests will begin. At this time, the exercise is stopped and analysis takes place of how the frustration was built, for what reason, how it could have been relieved, why participants followed instructions they would have preferred to disregard. Among other things, this exercise will impress upon participants the advantages of lively, engaging, exciting teaching techniques.

9. *Field trips*

   Inservice training of more than two or three days' duration will usually include visits to local institutions for observation or participation. Useful field trips include:

   a. Halfway houses, if they will permit opportunities to talk with patients and staff; ex-addicts on staffs may be especially helpful.
   b. Juvenile detention centers, to observe circumstances of arrest and incarceration and to hold discussions with staff and defendants. Possibly, incarceration in a de-

tention center or jail, for the experience of being locked in, or working for one day as an aide in a withdrawal hospital or treatment center for first-hand observation of drug effects.

c. Courthouses, for discussions with judges, lawyers, prosecutors, probation officers, possibly defendants.
d. Mental hospitals and drug treatment units, for discussions and observations.
e. Young peoples' meeting places—folk churches, stores, be-ins, parks, youth centers.
f. Turnstile houses for runaways and drop-in houses for young drug addicts.
g. Rock music halls—psychedelic sound and light shows—radio stations with audience participation rock programs. The workshop director should guide participants to observe how adolescents react to sensory bombardment. Enjoyment of the stimulation and inundation of sound, sight, words or lyrics, and of kinetic activity (dancing) can be contrasted with unstimulating activities of the classroom. Workshop participants might be urged to contrast their own feelings at the end of an evening at a rock dance with their feelings after a usual evening at home or in front of TV.
h. Youth-audience movie houses.
i. High school chemistry department or college of pharmacology, for practical observation and information about drugs.
j. Research laboratories to observe drug experiments.
k. Offices of hospital social workers—observation and interviews.
l. Where practical, visits to local schools for investigation of (1) bad school situations, and (2) good school programs.

Advantage should be taken of opportunities to observe the drug scene from several points of view. For example, a visit to a hospital may provide interviews with staff as they see the drug problem, as well as with patients. To determine the best ways to conduct productive interviews and to insure against failures, it is advisable for workshop directors or their assistants to check out field trips and interviews in advance.

10. *Drug education films*

Films about drugs may be shown at inservice workshops for (1) educational value to the viewers; (2) to substitute for speakers or to emphasize facts or precepts; (3) to help the audience learn to evaluate films and use them effectively.

Film quality varies widely. Many films still in circulation have lost their potency through age. Hats, skirt lengths, automobiles, outmoded slang, nullify a message no matter how timeless. A film which is up-to-date visually may be marred by dated script and outdated attitudes. Any educator who shows a film he has not previewed himself does so at great risk, regardless of who recommended it. Directors can illustrate this at workshops by showing ineffective drug films as examples of what not to do. They can illustrate the advisability of previewing films before representatives of the ultimate audience by tape recording student reactions to a film and playing this back to workshop participants who have just seen the film and formed their own opinions. More often than not there will be great diversity.

Where no suitable film for a specific purpose is to be found, an alternative that can be demonstrated at a workshop is to show not entire films but segments. Another possibility is to stop a film at spots where meaningful discussion can take place, or where a film's weaknesses can be discussed.

11. *Reading materials*

If funds permit, providing a kit or binder of carefully selected reading material for participants to keep for reference and reminders is beneficial.

In some situations a kit of materials may be designed for special purpose or effect. For example, a kit loading participants with more material than can possibly be digested in the time allotted, or with poorly selected or irrelevant material, can be used to bring home to the participating teachers the reactions of students exposed to the same kind of inundation. The effect is compounded if homework assignments are stressed.

Except where special situations such as the above prevail, a file or book of selected material should provide information required as background for the subjects to be covered and should be both concise and as complete as possible without duplicating the oral, taped or visual programs. The book can also offer important material which either cannot be covered in the workshop or, because of its technical, statistical or special nature, is best put in writing. Samples of useful literature for distribution to students may be included, with information as to source and cost.

Sometimes reading material is sent in advance as preparation for a conference. While this can be helpful, it is usually difficult enough to get such a kit ready by opening day, let alone ahead of it.

If a kit of materials is not given workshop participants, it is helpful to provide them with a program of the events scheduled, a listing of participants' names, and a bibliography of reference materials such as the one given at the end of this guide to provide directors of orientation or inservice training with background information and ideas.

12. *Housekeeping*

A stimulating, instructive, satisfying conference or workshop is most likely to be achieved when the director has adequate financing, sufficient authority, and deputies to look after housekeeping details so that he can concentrate on the programming. Except for the smallest meetings, a secretary or assistant for physical arrangements is indispensable.

Selecting a meeting site is not difficult for interrupted programming, since usually all that is required is a comfortable and accessible place suited to the participants and program. A continuous program of a weekend or longer presents more problems. Ideally, it should be held at a facility that is not part of the participants' daily routine. A motel on the outskirts of town, accommodations at a mental hospital or youth treatment center, are the type of settings removed from daily living that are most conducive to concentrated and intensive learning.

When the site is selected, a director or his assistant might use the following checklist of services and arrangements likely to be required:

a. Housing: Number of nights—singles and doubles—check-in and check-out times—prices—special requirements, if any.
b. Means: Hours—numbers for breakfasts, lunches, dinners—special dietary requirements—between-meal snacks—financial arrangements.
c. Transportation: To meeting if required—from meeting if required—for field trips—parking—special transportation for speakers, consultants, program leaders, staff.
d. Meeting rooms: Number required—sizes required—hours—permits (keys, arrangements with guards, passes)—utilities (lights, heat, air-conditioning)—furnishings (podium, desks, tables, chairs).
e. Equipment other than audiovisual: Blackboards, easels, bulletin boards—photocopying machine—telephones and telephone numbers—special lighting—notepads, pencils—drinking water—name tags.
f. Audiovisual equipment: Public address system, microphones—recorders and tapes—projectors and screens—TV, radio or phono—cameras—permits or clearances for use of material—backup audiovisual equipment.
g. Printed material: Registration forms—programs—instruction sheets—reference books or kits.
h. Program items: Films—reference books, dictionaries, phonograph records—material for demonstration or distribution.
i. Miscellaneous services: Greeting participants—wake-up services—emergency arrangements—secretarial help—payments and check cashing.
j. Publicity, photographs, press conferences—if determined advisable.
k. Emergency arrangements: Delays—absences of speakers and program principals.
l. Evaluation: Questionnaires — check sheets.
m. Clean-up: Equipment removal—housecleaning—payments—thank-you letters.
n. Followup: Arrangements for future meetings.

Miscellaneous suggestions made by directors of successful workshops and conferences include the following:

a. Strive for informality. Study and learning flourish in a friendly, cordial atmosphere, tend to be stunted by rigidity. Conference directors are urged to encourage informal communication and friendly arrangements of seats, lecterns, tables and audiovisual and other equipment, and to rearrange the seating from time to time.
b. Record programs amenable to taping

or videotaping, such as speeches, panel discussions, proceedings of discussion groups, group activities. Some of these presentations, played back either immediately after a program or after intervening programs, may spark useful discussion. Some tapes may be useful for lending to participants either for review or for use at subsequent programs. They are also useful in cases of temporary absences from sessions due to emergencies. Recording and playback will be facilitated if a professional audiovisual consultant is on hand.

c. Provide time for impromptu discussion. Information and insights can be gained from informal discussions following programs or during meal times or free periods, particularly if speakers and other workshop leaders attend. (One should avoid allowing so much time that participants' feelings are dissipated.)

d. Secretarial assistance. Details to which secretarial help can attend include: finances, emergencies, arrangements for reproduction of transcripts, speeches and other material, checking on equipment, transportation arrangements.

e. Credit for inservice training. If possible, increment credit should be given for inservice training, and released time arranged. At the very least, a certificate of attendance should be offered. Post-conference letters to supervisors of inservice training participants will often help the participants put to use what they have learned.

13. *Workshop programming in terms of workshop length*

While workshop programming must depend on time and budget available, directors should opt for the maximum in the knowledge that value obtained for the investment goes up appreciably with each day and each $100 added to the base.

A one-day program is a minimum effort. It is better than no inservice training for teachers, but not as effective as longer programs because the subjects introduced must be limited and the time will be insufficient to change attitudes and skills significantly. Just as music can be heard on a small, AM radio, its sound is more enjoyable if FM is added and still further improved with stereo or a custom-designed high fidelity system.

Program contents are compared below in terms of program length, to indicate how much more can be presented and gained as the time span is increased.

WORKSHOP PROGRAMS OF VARYING LENGTHS

Suggested One-Day Program (Least effective—most expensive, in terms of returns)
Definitions of drug use, misuse and abuse
Psychosocial issues
Pharmacology
Interviews with students
Role of education

Suggested Weekend Program
Increase the depth in coverage of topics listed above and add:
Legal aspects
Discussions with former users
Review of audiovisual materials—perhaps two drug films and filmstrips, with subsequent discussion periods

Suggested Three-Day Program
Increase the depth in coverage of topics listed above and add:
Statistics
Goals of drug abuse education
Exercises in group processes
Religion and drugs
Discussions with students, on a one-to-one or other basis

Suggested Five-Day Program
Increase the depth in coverage of topics listed above and add:
Current research in drugs
Cultural influences and determinants in drug use
Field trips to treatment and rehabilitation centers
Exercises in communication—listening to pop music and, especially, the lyrics; reactions of students, then teachers, to a drug film
Analysis of existing drug education programs
Panel discussion presenting divergent points of view on basic issues and values involved in drug abuse. Panel could include young people, drug user, enforcement officer, and others, depending on views to be heard
Writing of guidelines for drug education for teachers—for students

Suggested Two-Week Program
A workshop of this length permits the most innovative and desirable program. The scope and depth of coverage of all topics listed above can be increased, and the following added:
History of drugs and drug problems
Relation of drug abuse to other problems
Additional field trips to community facilities
Assignments—a day as an aide in a treatment facility or youth center
Review of related materials—audiovisual, printed, press
Development of instructional materials—guidelines, pamphlets, audiovisuals. Review of them by teachers or students invited to workshop for this purpose

6/ SELECTED REFERENCES

SELECTED REFERENCES IN DRUG ABUSE EDUCATION

BOOKS

Barber, Bernard. *Drugs and Society*. Russell Sage Foundation, New York 1967 ($6.50). A book on the sociology of drugs which discusses therapeutic drugs, "religious" drugs and "addictive" drugs and points out that substances called drugs must be studied from the physiological, the psychological and social aspects. Includes material on the drug industry, testing of drugs, government control and supervision, police approaches vs the socio-medical.

Blakeslee, A. *What You Should Know About Drugs and Narcotics*. Associated Press, 50 Rockefeller Plaza, New York, N.Y. 1020. 1969. $1.00 Quantity rates available. A series of newspaper articles has been published in a 48-page book.

Blum, Richard H., et al. *The Utopiates: The Use and Users of LSD-25*. Atherton Press. New York 1964 ($8.00). A major study of LSD use in a variety of settings, and of users, and non-users. Contains chapters on the psychopharmacological, legal and social aspects of LSD.

Blum, Richard, Ph.D. & Associates. *Drugs I: Society and Drugs*. Social and Cultural Observations. *Drugs II: Students and Drugs*. College and High School Observations. Jossey-Bass Publishers, San Francisco, 1969 ($20. for two volumes). These two volumes contain the results of eight years' research by Blum and his associates and include historical, cross-cultural, social and psychological studies on drug use and abuse. They are based on work covering over 200 cultures and 20,000 individual interviews and questionnaires.

Chein, I. et al. with the collaboration of Daniel M. Wilner. *The Road to H: Narcotics, Delinquency, and Social Policy*. ($12.50). Basic Books. New York. 1964. Major research study in the field of narcotic addiction which includes some case studies as well as statistics.

Cohen, Sidney. *The Beyond Within: The LSD Story*. Atheneum, New York 1964 ($5.95). One of the early psychiatrists to explore the effects of LSD during the past 10 years presents reports on "good trips" and "bad trips," discusses "good" uses and "bad" uses.

Cohen, Sidney. *The Drug Dilemma*. McGraw-Hill, New York 1968 ($4.95, paperback/$2.95). Concise description of drug use, focusing on relationships between the agent, the host, and the setting. Drug abuse progenitors discussed. Excellent advice to parents and educators on dealing with drug problem.

Drug Abuse: Escape to Nowhere, National Education Association, Publication-Sales Department, 1201 Sixteenth Street, N.W., Washington, D.C. 20036; price $2.00, quantity rates upon request. Number 244-07816.

Ebin, David (ed). *The Drug Experience*. Grove Press, New York 1965 (95¢). First person accounts of addicts, writers, scientists and others regarding cannabis, opium, opiates, peyote, mushrooms and LSD.

Farber, S. M. and Wilson, R. H. L. (eds.). *Conflict and Creativity: Control of the Mind,* Part II. McGraw-Hill, New York 1963 (paper $2.95). Articles by Isbell on the history of American attitudes toward addiction and by Beecher, Hollister and others on methodological problems in research on drugs.

Goldsmith, Richard. *The Poetry of Rock*. Bantam Books, Inc. 1969. ($1.00). Discussion of rock music and reprints of 70 representative modern songs.

Huxley, Aldous. *The Doors of Perception and Heaven and Hell*. Harper and Row, New York 1956 ($1.45). In the 1940's researcher Humphrey Osmond gave Huxley some mescaline, precisely because he counted on Huxley's skill at describing his experiences in vivid detail. He did.

Kluver, Heinrich. *Mescal and Mechanisms of Hallucinations*. Phoenix Books, Chicago, Ill. 1966 ($1.50). Mescaline, alkaloid present in buttons of a small cactus, mescal, as related to LSD.

Lindesmith, Alfred R. *The Addict and the Law*. Indiana University Press, Bloomington, Ind. 1965 ($7.50). Also Vintage Books ($1.95). A discourse on the criminogenic aspects of drug laws and police practice with a plea for a new way of looking at and treating drug addicts.

Lingeman, Richard R. *Drugs from A to Z: A Dictionary*. McGraw-Hill, New York. 1969. ($6.95. Paper $2.95). A lexicon with historical, pharmacological, medical and botanical data. Presents a description of colloquial terms, jargon, and literary quotations about drugs and their abuse.

Masters, R. E. L. and Houston, Jean. *The Varieties of Psychedelic Experience*. Holt, Rinehart and Winston, New York 1966 ($7.95). Analysis of data based on first-hand observations of 206 drug sessions and interviews with an additional 214 subjects who took the drug in a variety of settings. Discussion of the effects of drug taking with respect to body image, perceptions of other persons, repressed experiences, symbolism, religious and mystical experience.

Nowlis, Helen H., Ph.D. *Drugs on the College Campus*. Anchor Books, Doubleday, New York ($.95). An exhaustive appraisal in lay terminology which educators may find useful. It covers terminology, attitudes, chemistry, sociology, law, morality and education as they affect both the user and society. The book contains an annotated bibliography, a glossary, and Dr. Joel Fort's comprehensive chart on drugs and their effects.

Robinson, M. Nyswander. *The Drug Addict as Patient.* Grune and Stratton, New York 1956 ($6.95). Physicians who have treated narcotic addicts describe various approaches used in private practice and institutional care. It may be useful to a wide variety of professional people in contact with addicts.

deRopp, Robert S. *Drugs and the Mind.* Grove Press, New York 1957 (95¢). A biochemist discusses the mental effects of chemicals in the brain and on the brain. The book is 12 years old but still generally valid.

Schur, Edwin M. *Crimes Without Victims: Deviant Behavior and Public Policy.* Prentice-Hall, Englewood Cliffs, N.J. 1965 ($1.95). The classic plea for attention to public policy concerning abortion, homosexuality and drug-taking.

Simmons, Jerry L. and Winograd, Barry. *It's Happening.* Brandon House, No. Hollywood, California 1966 ($1.95). Widely read by college students. This sociological study of the goals, ideals and activities of the affluent college drug users is a "subcultural" study written for the layman.

Solomon, David. *LSD: The Consciousness Expanding Drug.* G. P. Putnam's Sons, New York 1964 ($5.95). Reprinting of 15 papers on LSD by Huxley, Osmond, Leary, Kast, Unger and others.

Solomon, David (ed). *The Marihuana Papers.* Bobbs-Merrill Co., Indianapolis, Ind. 1966 ($10.00). Reprint of some classic and out-of-print papers dealing with marihuana. Divided into sections considering: 1) historical, sociological and cultural; 2) literary and imaginative, and 3) scientific.

Taylor, Norman. *Narcotics—Nature's Dangerous Gifts.* Delta Publishing Co., New York 1963 (75¢). (Also Dell $1.65). Despite the misleading title, a sound lay description of many of the "mind-altering" drugs.

PAMPHLETS

Drugs of Abuse. Reprint from Food and Drug Administration Papers, July–August, 1967. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Number 1968–0–312–959. Colorful flyer on stimulants, depressants, and hallucinogens.

Narcotics (PHS 1827), *LSD* (PHS 1828), *Marihuana* (PHS 1829), *The Up and Down Drugs* (PHS 1830). Supt. of Documents, U.S. Government Printing Office, Washington, D.C. 20402. 5 cents each or $3 for 100 except *Marihuana* is $3.75 for 100). These fliers, produced by the National Institute of Mental Health, use questions and answers to describe each drug and to describe mood effects, physical effects, medical uses, misuses, and research. Fine for students and general distribution.

Task Force Report: Narcotics and Drug Abuse. Supt. of Documents, U.S. Government Printing Office, Washington, D.C. 20402. 1967 ($1.00). Annotations and Consultants' Papers of the Task Force on Narcotics and Drug Abuse, the President's Commission on Law Enforcement and Administration of Justice. Gives recommendations for control, research, education, treatment, civil commitment and coordination of Federal level programs. Could be considered a textbook for educators, college and senior high school students.

The Crutch That Cripples. Drug Dependence. Committee on Alcoholism and Drug Dependence, Council on Mental Health, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610. (25¢). Quantity rates. Brief pamphlet containing much information on dependence, medical uses of drugs, symptoms, where to get help, and prevention of abuse.

Thinking About Drinking (PHS 1683). Supt. of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (20 cents each; $15 per 100). Produced by the National Institute of Mental Health and the Children's Bureau as a basis for discussion with young people of attitudes about drinking. It reflects the latest findings in alcohol research.

PERIODICALS

Drug Dependence. National Clearinghouse for Mental Health Information, NIMH, Chevy Chase, Md. 20015. Published at random intervals. Addressed to the scientific and medical community and other concerned professionals. Contains selected items covering recent developments in the field and identifies citations to the current abstracts available from NCMHI.

UN Bulletin on Narcotics. United Nations Publications, Rm. 1059, UN Bldg., New York 10017, (quarterly, $2 per year). Official notices of reports of meetings and actions taken by United Nations, including World Health Organization, related to drugs. Contains original scientific research papers and review articles.

The International Journal of the Addictions. Issued semiannually by the Institute for the Study of Drug Addiction, 680 West End Avenue, New York 10025, ($6.00 per year). Provides a worldwide forum of exchange among professionals participating in research, training, and treatment in the field of addictions and substance misuse. An International editorial board, comprised of members of the various medical professions, focuses on all facets of substance misuse—drug, alcohol, tobacco and food.

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